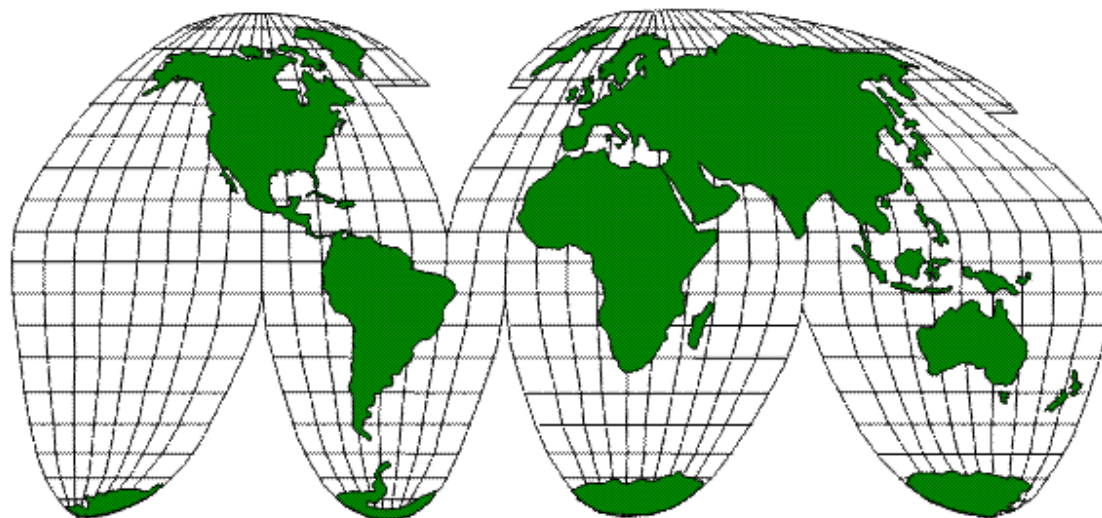


DEFENSE HEALTH PROGRAM



**CLEARED
For Open Publication**

Apr 08, 2022

Department of Defense
OFFICE OF PREPUBLICATION AND SECURITY REVIEW

Fiscal Year (FY) 2023 President's Budget

OPERATION AND MAINTENANCE

PROCUREMENT

RESEARCH, DEVELOPMENT, TEST AND EVALUATION

Volume 1: Justification Estimates

Volume 2: Data Book

April 2022

The Defense Health Program spans the globe in support of the Department of Defense's most important resource--active and retired military members and their families.

Preparation of the Defense-Wide budget excluding revolving funds, cost the Department of Defense a total of approximately \$1,148,520 in FY 2022

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(\$ in Millions)

<u>Appropriation Summary:</u>	FY 2021¹ <u>Actuals</u>	Price <u>Growth</u>	Program <u>Growth</u>	FY 2022² <u>Enacted</u>	Price <u>Growth</u>	Program <u>Growth</u>	FY 2023³ <u>Estimate</u>
Operation & Maintenance ⁴	31,586.1	1,125.7	1,251.2	33,963.0	1,256.0	95.7	35,314.7
RDT&E	2,395.1	13.1	225.3	2,633.5	14.6	-1,738.1	910.0
Software and Digital Technology Pilot Programs	0.000	0.000	0.000	0.000	0.000	137.4	137.4
Procurement	444.4	14.2	300.1	758.7	23.2	-211.8	570.1
Total, DHP	34,425.6	1,153.0	1,776.6	37,355.2	1,293.8	-1,716.8	36,932.2
MERHCF Receipts	<u>11,136.7</u>			<u>11,399.7</u>			<u>12,604.9</u>
Total Health Care Costs	45,462.3			48,754.9			49,537.1

^{1/} FY 2021 actuals includes \$354.322 million for OCO, \$10.0 million for Fisher House, excludes funds transferred to VA for Lovell FHCC and the Joint Incentive Fund (\$152.0 million)

^{2/} FY 2022 enacted includes \$251.851 million for Direct War, \$5.0 million for Fisher House, \$137 million for transfer to VA for Lovell FHCC, and \$15 million for transfer to Joint Incentive Fund.

^{3/} FY 2023 request includes \$116.171 million for Overseas Operations Costs, \$167.610 million for transfer to VA for Lovell FHCC and \$15 million for transfer to Joint Incentive Fund.

^{4/} Reflects DoD Medicare-Eligible Retiree Health Care Fund (MERHCF) O&M transfer Receipts for FY 2020, FY 2021 and FY 2022 that support 2.5 million Medicare-eligible retirees and their family members.

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Description of Operations Financed:

The Defense Health Program (DHP) Operation and Maintenance (O&M) appropriation funding provides for worldwide medical and dental services to active forces and other eligible beneficiaries, occupational and industrial health care, and specialized services for the training of medical personnel. The MHS provides care in government owned and operated medical treatment facilities focused on sustaining readiness of the medical force and the medical readiness of deployable forces. Additionally, the MHS purchases more than 65 percent of the total care provided for beneficiaries through tailored contracts, such as Managed Care Support Contracts responsible for the administration of the TRICARE benefit. The DoD Medicare Eligible Retiree Health Care Fund (MERHCF) is an accrual fund to pay for DoD's share of applicable Direct Care and Private Sector Care operation and maintenance health care costs for Medicare-eligible retirees, retiree family members and survivors.

The COVID-19 Pandemic had, and continues to have, a major impact on the DoD and the Military Health System (MHS), in terms of both the management of the pandemic inside DoD and the MHS's larger role in the national "whole of government" counterattack against the virus. The MHS will continue its efforts to eradicate the virus and apply lessons learned which will have an immediate and sustained impact on the ability of the MHS to support the ongoing pandemic and to prepare for future major public health emergencies. FY 2023 funding will support COVID-19 and pandemic response priorities to integrate essential requirements for prevention, diagnosis, and surveillance health activities.

Directed in the National Defense Authorization Act (NDAA) for Fiscal Years 2017 and 2019, the MHS is undergoing its most significant transformation in decades. The reforms set forth in the NDAA change the structure of the health care benefit and the management of the MHS. The Defense Health Agency's centralized administration of Military Treatment Facilities (MTFs) will transform the MHS into an integrated readiness and health system, eliminate redundancies and create a standardized high quality care experience for our beneficiaries. In FY 2022, the Department took a strategic pause to adjust previous budgeted divestiture ramps to address updates in operational plans and national security and defense strategies and match congressional direction, while integrating mitigation plans between the Services and the Defense Health Agency. The FY 2023 President's Budget resumes divestitures at new, more gradual, reduction ramps. Additionally, in response to previous NDAA direction, the Department realigned the Army Medical Research, Development, and Acquisition Capabilities to DHP along with Public Health Functions from the Military Services.

Private Sector Care continues to be a vital part of the Military Health System in FY 2023 and represents over half of the Operations and Maintenance requirement. Over the period of FY 2012 to FY 2018, both private health insurance premiums and National Health Expenditures per capita rose 25% (or 3.7% annually). The Private Sector Care budget should have continued to rise but the Department, with concurrence from Congress, instituted a series of initiatives that bent the cost curve. A combination of benefit changes, payment savings initiatives, contract changes, and population reductions offset underlying increases in health care costs, which is estimated to have saved \$3.5 billion over a six year period. Beginning toward the end of FY 2019 and continuing into FY 2020, the Department began to experience significant growth without the benefit of new reforms to offset the increases. Once COVID-19 appeared, the pandemic changed daily lives to and initially suppressed much of the non-emergent health care demand in FY 2020. In FY 2021, the health care demand in the MHS returned to more normal levels of care along with higher healthcare costs associated with the on-going COVID-19 pandemic. In FY 2022, the Department focused on re-baselined funding for Private Sector Care healthcare requirements using the latest execution data, National Health Expenditure rates, beneficiary population forecasts, and current policy/compensation assumptions. Based on FY 2021 execution and FY 2022 execution to-date, the much higher PSC baseline update was valid. In FY 2023, the

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Department will continue to monitor the growth in Private Sector Care and the FY 2023 request fully funds the Department's anticipated PSC requirements in order to reduce risk to other DoD programs. Private Sector Care will continue to represent an important part of the overall health system in FY 2023. Mental Health continues to be an area of emphasis across the DoD.

The FY 2023 budget invests \$1.4 billion in Clinical mental health programs and initiatives include those which evaluate, treat, and follow-up with patients with a variety of mental health issues. These programs leverage evidence-based best practices and treatment, practical problem resolution, case management and crisis management to support positive health outcomes. Ongoing mental health efforts within the Department include: Primary Care Behavioral Health, Tele-Behavioral Health, National Intrepid Center of Excellence and Intrepid Spirit Centers, Substance Abuse Program, as well as research on mental health aimed to accelerate the innovation and delivery of preventive interventions and treatments for TBI, PTSD, and other mental health conditions.

The DoD and the Department of Veteran's Affairs continue to progress in the establishment of the unified Electronic Health Record. In FY 2023, the DoD continues funding the clinical application, HealthIntent, which provides a platform for population health and analytic tools, and offers a seamless longitudinal record between the DoD and VA that will grant providers and beneficiaries' access to detailed medical histories.

The FY 2023 budget supports the completion of MHS GENESIS deployments in the Continental United States with Waves JACKSONVILLE, EGLIN, PORTSMOUTH, DRUM, WALTER REED, BELVOIR, AND WRIGHT-PATTERSON slated to go live within FY 2023. The budget also includes the continued deployment of Revenue Cycle Expansion (RevX), the MHS GENESIS accounting system, to facilities that have MHS GENESIS. This is all part of the Defense Healthcare Management System Modernization Program (DHMSM) Program Management Office's (PMO) updated deployment schedule and incorporates lessons learned from prior deployments completed to date. In addition, the following waves outside the continental United States are slated to continue or begin deployment activities in FY23: Waves LANDSTUHL, LAKENHEATH, OKINAWA, GUAM, and SOUTH KOREA. Additional enhancements to MHS GENESIS will provide expanded analytics and data modeling; decision-support, integrated patient level accounting and billing functionality, and advanced prognostic competencies.

The DHP appropriation funds the Research, Development, Test and Evaluation (RDT&E) program developed in response to the needs of the National Defense Strategy and Joint Capabilities Integration and Development System (JCIDS). The goal is to advance the state of medical science in those areas of most pressing need and relevance to today's battlefield experience and emerging threats. The objectives are to discover and explore innovative approaches to protect, support, and advance the health and welfare of military personnel and individuals eligible for care in the MHS; to accelerate the transition of medical technologies into deployed products; and to accelerate the translation of advances in knowledge into new standards of care for injury prevention, treatment of casualties, rehabilitation, and training systems that can be applied in theater or in military medical treatment facilities. The FY 2023 President's Budget includes funding realigned from Army to DHP for the Army Medical Research, Development, and Acquisition Capabilities.

The DHP is utilizing the Department's Software and Digital Technology Pilot Program as a subset of the RDT&E appropriation for the Defense Medical Information Exchange/Enterprise Intelligence and Data Solutions (DMIX-EIDS) program. The Software and Digital Technology Pilot Program is in response to Section 872 of the National Defense Authorization Act (NDAA) for FY 2018 directed by the Secretary of Defense to task the Defense Innovation Board (DIB) to undertake a study on "streamlining software development and acquisition regulations."

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The DHP Procurement program funds acquisition of capital equipment in MTFs and other selected health care activities which include equipment for initial outfitting of newly constructed, expanded, or modernized health care facilities; equipment for modernization and replacement of uneconomically reparable items; and MHS information technology (IT) requirements.

Narrative Explanation of FY 2022 and FY 2023 Operation and Maintenance (O&M) Changes:

The DHP O&M funding reflects an overall increase of \$1,351.7 million between FY 2022 and FY 2023, consisting of \$1,256.0 million in price growth and a net program increase of \$95.7 million. \$161.1 million of Overseas Operations Costs is included in the base request.

Program **increases** include:

- \$254.9 million transfer of civilian pay funds, full-time equivalents, Base Operations, Facilities, Restoration, and Modernization, Facilities Sustainment, Information Management Information Technology, and associated programmatic resources for the Army Medical Research, Development, and Acquisition Capabilities from the Department of the Army
- \$199.7 million to address the estimated impacts of Executive Order 14026, Increasing the Minimum Wage for Federal Contractors, dated April 27, 2021
- \$85.8 million increase in National Retail Pharmacy utilization
- \$77.6 million transfer of full-time equivalents, civilian pay and non-pay funding from the Department of the Army and the Department of the Air Force to complete the Department of Defense Public Health consolidation at the Defense Health Agency in accordance with Section 711 of the National Defense Authorization Act of FY 2019
- \$75.8 million transfer from Department of Army for Army Deployment Health Programs and associated funding
- \$49.4 million provides funds for Joint Operational Medicine Information Systems requirements
- \$29.8 million increase to adequately fund the Joint Department of Defense - Department of Veterans Affairs Medical Facility Demonstration Fund (James A. Lovell Federal Health Care Center Great Lakes)
- \$28.6 million for restoration and modernization project requirements that improve the facility condition index for the Military Health Systems to promote safe, reliable, high quality health care and comply with accreditation standards mandated by The Joint Commission and other accrediting bodies
- \$24.3 million increase continues Department of Defense Healthcare Management System Modernization funding for the Military Health System GENESIS Electronic Health Record systems operations and support
- \$23.1 million supports the FY 2022 NDAA note on the national security challenges posed by anomalous health incidents
- \$16.6 million transfer of funding for Facilities Restoration and Modernization and Facilities Sustainment from Department of the Army for the restoration and modernization project requirements for Veterinary Treatment Facilities that support Public Health and Veterinary Services
- \$11.4 million increase for IT contracts support services funds in Integrated Electronic Health Record for building capacity and expertise to effectively manage the Department of Defense/Department of Veterans Affairs joint system configuration that ensures technical health system requirements meet provider and patient needs
- \$10.4 million funds the request from the Under Secretary of Defense (Comptroller) (USD(C)) to transfer audits funds to the Defense Health Agency (DHA) to properly align the funding with the requirement to hire Independent Public Accounts for the standalone financial statement audits conducted by DHA
- \$4.9 million increase to support Cyber Security Service Provider requirements/growth due to increased customer base with the transition of the Medical Treatment Facilities and other lines of business to the Medical Community of Interest, additional software licenses, and hardware purchases

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- \$3.2 million funds Facilities Operation contract requirements for facilities, contract, and associated costs to plan, manage and execute lease, utility, refuse collection and disposal, prevention and protection, and real property management functions
- \$0.5 million increase in funding and full-time equivalents to support the Secretary of Defense's direction to implement the Independent Review Commission recommendations on sexual assault in the military
- \$0.5 million for transfer of funding and full-time equivalents associated with the Continuous Process Improvement/Lean Six Sigma Training Team from Department of the Army
- \$0.1 million increase for transfer of funding from Department of the Army for communications that support the Deployment Health function

Program **decreases** include:

- \$391.9 million reduction in COVID funding assumes that future outbreaks in COVID variants will be less extensive and less severe due to increased vaccination/natural immunity as seen with the Omicron variant, which had less hospitalization costs and more outpatient care
- \$132.3 million for the continued transfer of the Service's Medical Readiness activities which occur outside of the Military Treatment Facilities to the Military Departments
- \$127.2 million realigns funds from Operations and Maintenance, Information Management/Information Technology, DoD Medical Information Exchange and Interoperability to Research, Development, Test, and Evaluation appropriation to establish the Software Digital Technology Budget Activity (BA) 08 Pilot
- \$78.0 million adjustment to reverse one-time funding of Facilities, Sustainment, Restoration and Modernization
- \$48.7 million reduces the Military Health System Information Management/Information Technology Legacy sustainment funding as the Defense Health Agency implements consolidation measures to reduce infrastructure costs at the Military Treatment Facilities and the Defense Health Agency
- \$8.0 million reduction of resources for the FY 2022 Fraud and Abuse Prevention legislative proposal
- \$6.8 million reduction in Education and Training travel and equipment requirements at the Defense Health Agency through consolidation of programs and use of simulation equipment
- \$5.0 million adjustment to reverse one-time funding of Fetal Alcohol Spectrum Disorders Prevention and Clinical Guidelines
- \$2.5 million adjustment to reverse one-time funding of Specialized Medical Pilot Program for military orthopedic surgeons advanced arthroscopy skills course
- \$0.5 million reduction in Management Activities contract requirements funding through Military Health System enterprise-wide efforts to consolidate contracts and to increase contract standardization, elimination of duplicative contracts, leveraging market buying power, and continued use of nationwide contracting sources

Continuing in FY 2023, the Department projects that up to \$167.6 million should transfer to the Joint DoD -VA Medical Facility Demonstration Fund established by section 1704 of Public Law 111-84, (National Defense Authorization Act for FY 2010). This fund combines the resources of DoD and VA to operate the first totally integrated Federal Health Care Center in the country by the total integration of the North Chicago VA Medical Center and the Navy Health Clinic Great Lakes, IL.

Continuing in FY 2023, the Department will transfer \$15 million to the DoD-VA Health Care Joint Incentive Fund (JIF). Authority for the JIF is established by Section 8111, Title 38, of the United States Code (USC) and Section 721 of Public Law 107-314(National Defense Authorization Act for 2003). This fund combines the resources of the DoD and VA to implement, fund, and evaluate creative coordination and sharing initiatives at the facility, intraregional, and nationwide levels.

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Narrative Explanation of FY 2022 and FY 2023 Research Development Test & Evaluation (RDT&E) Changes:

The DHP RDT&E Program reflects a net decrease of \$1,723.5 million between FY 2022 and FY 2023. This includes a price growth of \$14.6 million and a program decrease of \$1,738.1 million.

Program increases include:

- \$83.5 million increase in associated with the programmatic transfer in accordance with the 711/737 US Army Medical Research and Development Command transfer to Defense Health Agency in support of Medical Technology from Army PEs 0602115A & 0602787A.
- \$68.0 million increase associated with the programmatic transfer in accordance with the 711/737 US Army Medical Research and Development Command transfer to Defense Health Agency in support of Medical Materiel/Medical Biological Defense Equipment Development from Army PE 0603807A.
- \$42.1 million increase associated with programmatic transfer in accordance with the 711/737 US Army Medical Research and Development Command transfer to Defense Health Agency in support of Medical Products and Support System Development from Army PEs 0604807A.
- \$35.5 million increase associated with programmatic transfer in accordance with the 711/737 US Army Medical Research and Development Command transfer to Defense Health Agency in support of Medical Care Activities from Army PEs 0603115A, 0605145A, 0605801A, 0606105A.
- \$30.3 million increase associated with the programmatic transfer in accordance with the 711/737 US Army Medical Research and Development Command transfer to Defense Health Agency in support of Defense Research Sciences from Army PE 0601102A.
- \$21.9 million increase associated with the programmatic transfer in accordance with the 711/737 US Army Medical Research and Development Command transfer to Defense Health Agency in support of Medical Materiel/Medical Biological Defense Equipment Development from Army PE 0603807A.
- \$15.0 million increase in supports the FY 2017 NDAA note on the national security challenges posed by anomalous health incidents (P. L. 114-328, 10 U. S. C. 111 note) and ensures that individuals affected by anomalous health incidents receive timely and comprehensive health care and treatment.
- \$12.3 million increase in support of the DHA Murtha Cancer Center to expand the Cancer Moonshot initiatives to improve the ability to identify personalized molecular tumor targets enabling precision cancer treatments.

Program decreases include:

- \$2,002.8 million decrease for FY 2022 one-time Congressional adjustments for congressional special interest.
- \$33.9 million decrease to Joint Operational Medicine Information Systems (JOMIS) program to align with the new JOMIS Acquisition Strategy signed by Milestone Decision Authority (MDA) Jan 2021. The update reflects the updated strategy and timeline for the program.
- \$10.0 million realignment for Defense Medical Information Exchange/Enterprise Intelligence and Data Solutions (DMIX-EIDS) program to establish the Software & Digital Technology Budget Activity on support of the Software and Digital Technology Program. Section 872 of the National Defense Authorization Act (NDAA) for FY2018 directed by the Secretary of Defense to task the Defense Innovation Board (DIB) to undertake a study on "streamlining software development and acquisition regulations."

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Narrative Explanation of FY 2022 and FY 2023 Software and Digital Technology.

The DHP Software and Digital Technology Program has a net increase of \$ 137.4 million between FY 2022 and FY 2023

Program increases include:

•\$137.4 million increase realigns O&M and RDT&E funding for Defense Medical Information Exchange/Enterprise Intelligence and Data Solutions (DMIX-EIDS) program office into the Software & Digital Technology Budget Activity. The program office was selected to be included in the pilot program based on the mission requirement to provide a comprehensive solution capable of supporting the evolving clinical and business data needs within the MHS and the DHA. These projects range in size and scale, often demanding accelerated timelines that are complex to manage in a portfolio of single-year appropriation that is put in place several years prior to execution and identification of requirements. The ability to use a single appropriation will allow the program to keep pace with demand and deliver these complex capabilities in an ever changing environment.

Program decreases include:

•N/A

Narrative Explanation of FY 2022 and FY 2023 Procurement Changes:

The DHP Procurement Program has a net decrease \$188.6 million between FY 2022 and FY 2023. This includes price growth of \$23.2 million and a net program decrease of \$211.8 million.

Program increases include:

•\$10.3 million increase in laboratory and diagnostic equipment to provide clinical laboratory testing in support of diagnosis and treatment of beneficiaries.
•\$1.5 million increase to Joint Operational Medicine Information Systems (JOMIS) program to align with the new JOMIS Acquisition Strategy signed by Milestone Decision Authority (MDA) Jan 2021. FY23 funding will support new capability deployment activities, which include deployment activities, "over-the-shoulder" support, and localized configuration.
\$0.406 million increase for replacement dental equipment to eliminate potential dental emergencies for operational readiness.

Program decreases include:

•\$192.7 million decrease due to overall phasing down of procurement as wave deployments are completed which aligns with the MHS GENESIS deployment schedule (Continued Acquisition Decision Memorandum (ADM) from the Assistant Secretary of Defense, Acquisition (ASD(A)) on Oct. 30, 2020).
•\$31.3 million decrease for the replacement of medical equipment across the Military Health System for Medical/Surgical, Preventive Medicine/Pharmacy, and Radiographic programs.

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President's Management Plan – Performance Metrics Requirements:

The Military Health System (MHS) continues to refine existing performance measures and develop specific criteria to determine and measure outputs/outcomes as compared with initial goals. The Quadruple Aim provides a focused and balanced approach to overall performance. This approach includes not only production but outcome measures related to medical readiness, a healthy population, positive patient experiences and the responsible management of health care costs.

- **Individual Medical Readiness** – This measure provides operational commanders, Military Department leaders and primary care managers use a measure to monitor the medical readiness status of their personnel, ensuring a healthy and fit fighting force medically ready to deploy. This represents the best-available indicator of the medical readiness of the Total Force (Active Component and Reserve Component) prior to deployment.
- **Beneficiary Satisfaction with Health Plan** – Satisfaction is measured using a standard survey instrument comparable to those used by civilian plans. The goal is to improve MHS beneficiary overall satisfaction with TRICARE to a level at or above benchmark satisfaction with civilian plans utilizing the Consumer Assessment of Healthcare Providers and Systems survey. Increasing satisfaction with the Health Plan indicates that actions being taken are improving the overall functioning of the health plan from the beneficiary perspective.
- **Medical Cost Per Member Per Year** – This measure focuses on the annual overall cost growth for the Prime enrollees and includes all costs related to health care delivered to enrollees. The objective is to keep the rate of cost growth for TRICARE Prime enrollees to a level at or below the increases for the Civilian health care plans at the national level. Currently, the measure provides insight to issues regarding unit cost, utilization management, and Purchased care management. The metric has been enhanced to properly account for differences in population demographics and health care requirements of the enrolled population. Since enrollment demographics can vary significantly by Service, and across time, it is important to adjust the measure. For example, as increasing numbers of older individuals enroll, the overall average medical expense per enrollee would likely increase. Conversely, as younger, healthy active duty enroll, the overall average would likely decrease. Through the use of adjustment factors, a comparison across Services and across time is made more meaningful.

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Below is reporting for FY 2021 performance measures related to the Quadruple Aim. Performance levels vary greatly compared to prior performance achievements primary attributable to the impacts of COVID-19 on the American health service delivery organizations as well as associated force health protection guidance for the MHS and larger Department of Defense. Therefore the performance is not representative of normal operations, and the MHS expects to experience continued impacts during FY2022 as the MHS supports the Federal Emergency Management Agency (FEMA) as part of the whole-of-government response in confronting COVID-19. The overall success of each measure is discussed below:

- **Individual Medical Readiness** – The MHS only achieved 82 percent for the Active Component Force Medical Readiness for FY 2021 versus the goal of 85 percent. The FY 2020 guidance that allowed for an extension of the deadlines for updating the Periodic Health Assessment (PHA) was not carried over to FY 2021. The measure exceeded the goal throughout FY2019 and the first two quarters of FY2020; however, during 3Q FY2020, performance dropped below 85 percent due to the COVID-19 pandemic's effect on access to care. With all of the issues surrounding the associated force health protection guidance for COVID-19, delays existed with updating of the PHA. Efforts are underway focused on improving the metric performance. The key drivers for improved performance include: (1) reduced delinquent PHAs, (2) reduced Deployment-Limiting Medical Conditions, (3) reduced percentage of delinquent dental exams (Dental Class 4), and reduced percentage of non-deployable dental conditions (Dental Class 3).
- **Beneficiary Satisfaction with Health Plan** – Satisfaction with Health Care Plan performance for FY2021 was 62 percent, which met the goal of 62 percent based on Consumer Assessment of Healthcare Providers and Systems (CAHPS) survey for the fiscal year. Overall, there was a slight decrease in the satisfaction level related to the continued access issues related to COVID-19. It appears that the continued access restrictions at the MTFs related to force health protections related to COVID-19 drove part of the decrease along with deployments in support of FEMA and whole-of-government response in confronting COVID-19. Online access to MTF PCMs and access to the MTFs improved throughout the year, and overall satisfaction with health care also improved. Major performance drivers for this measure are related to claims processing timeliness, interaction during health care encounter, and access to health care.
- **NOTE: Due to the deployment of MHS GENESIS and data availability issues, sites that have deployed the new Electronic Health Record are excluded from the PMPM measure.**
- **Medical Cost Per Member Per Year – Annual Cost Growth** – The performance estimate for FY 2021 is a 4.9 percent growth vs goal of 3.7 percent growth. When comparing the growth rate over two years from FY 2019, the FY 2021 overall increase was only 1 percent, well below the goal. This does not represent normal performance for the system and is primary attributable to the impacts of COVID-19 on the United States health care system during the pandemic. Overall, the entire health care system experienced a dramatic decrease in utilization of health care services for approximately 6 months during FY 2020. For the most part, the growth represents the start of the return to normal utilization that is expected to continue for the next couple of years. Without the extremely low growth rate for FY 2020, the MHS should return to more normal levels of growth and again exceed the goal.

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Funding by Budget Activity**

(Dollars in Thousands)

0130D Defense Health Program			FY 2021^{1/} Actual	FY 2022^{2/} Enacted	FY 2023^{3/} Request
			<u>Base + OCO</u>	<u>Total</u>	<u>Base</u>
<u>BUDGET ACTIVITY 01: OPERATION & MAINTENANCE</u>					
0130D	010	In-House Care	9,273,534	9,566,792	9,906,943
0130D	020	Private Sector Care	16,383,238	17,977,979	18,455,209
0130D	030	Consolidated Health Support	1,279,835	1,514,397	1,916,366
0130D	040	Information Management	2,225,271	2,231,149	2,251,151
0130D	050	Management Activities	337,725	333,138	338,678
0130D	060	Education and Training	310,507	340,734	334,845
0130D	070	Base Operations/Communications	1,776,318	1,998,797	2,111,558
TOTAL, BA 01: OPERATION & MAINTENANCE			31,586,128	33,962,986	35,314,750
<u>BUDGET ACTIVITY 02: RDT&E</u>					
0130D	DEFENSE HEALTH PROGRAM		2,395,081	2,633,488	909,994
TOTAL, BA 02: RDT&E			2,395,081	2,633,488	909,994
<u>BUDGET ACTIVITY 08: SOFTWARE & DIGITAL TECHNOLOGY PILOT PROGRAM</u>					
0130D	DEFENSE HEALTH PROGRAM				137,356
TOTAL, BA 08: S&DTPP					137,356
<u>BUDGET ACTIVITY 03: PROCUREMENT</u>					
0130D	DEFENSE HEALTH PROGRAM		444,369	758,708	570,074
TOTAL, BA 03: PROCUREMENT			444,369	758,708	570,074

1/ FY 2021 actuals include Division C, Title IX and Division J, Title IV of the Consolidated Appropriations Act, 2021 (P.L. 116-260) \$354.322 million for OCO, Fisher House (\$10.0 million)

2/ FY 2022 reflects enactment and includes \$251.9 for Direct War, transfers to FHCC (\$137 million), Fisher House (\$5.0 million) and JIF (\$15.0 million)

3/ FY 2023 request includes \$116.171 million for Overseas Operations Costs

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Summary of Price and Program Growth**

	<u>FY 2021 Program</u>	<u>Foreign Currency Rate Diff</u>	<u>Price Growth Percent</u>	<u>Price Growth</u>	<u>Program Growth</u>	<u>FY 2022 Program</u>	<u>Price Growth Percent</u>	<u>Price Growth</u>	<u>Program Growth</u>	<u>FY 2023 Program</u>
0101 EXEC, GEN'L & SPEC SCHEDS	5,953,777	0	2.27%	135,151	13,588	6,102,516	4.13%	251,729	-37,776	6,316,469
0103 WAGE BOARD	125,244	0	2.27%	2,843	26,143	154,230	4.13%	6,362	-13,648	146,944
0104 FN DIRECT HIRE (FNDH)	45,797	0	2.27%	1,040	-4,317	42,520	4.13%	1,754	1,816	46,090
0105 SEPARATION LIABILITY (FNDH)	1,137	0	2.27%	26	384	1,547	4.13%	64	-1,611	0
0106 BENEFIT TO FMR EMPLOYEES	0	0	0.00%	0	1	1	4.13%	0	72	73
0107 VOLUNTARY SEP INCENTIVES	1,037	0	2.27%	24	297	1,358	4.13%	56	-762	652
0110 UNEMPLOYMENT COMPENSATION	0	0	0.00%	0	5,830	5,830	4.13%	240		6,070
TOTAL CIVILIAN PERSONNEL COMPENSATION	6,126,992	0		139,083	41,927	6,308,002		260,205	-51,909	6,516,298
0308 TRAVEL OF PERSONS	64,336	0	3.00%	1,930	61,192	127,458	2.10%	2,677	-8,946	121,189
TOTAL TRAVEL	64,336	0		1,930	61,192	127,458		2,677	-8,946	121,189
0401 DLA ENERGY (FUEL PRODUCTS)	5,454	0	10.10%	551	-2,963	3,042	-7.47%	-227	-600	2,215
0402 SERVICE FUND FUEL	1	0	10.10%	0	90	91	0.00%	0	-14	77
0411 ARMY SUPPLY	0	0	0.00%	0	500	500	-0.28%	-1	-499	0
0412 NAVY MANAGED SUPPLY, MATL	1,059	0	8.29%	88	1,064	2,211	5.92%	131	-169	2,173
0414 AIR FORCE CONSOL SUST AG (SUPPLY)	0	0	0.00%	0	60	60	5.68%	3	-2	61
0416 GSA SUPPLIES & MATERIALS	1,544	0	3.00%	46	8,299	9,889	2.10%	208	170	10,267
0417 LOCAL PURCH SUPPLIES & MAT	0	0	0.00%	0	32,237	32,237	2.10%	677	-6,737	26,177
0422 DLA MAT SUPPLY CHAIN (MEDICAL)	2,684	0	0.20%	5	16,616	19,305	0.66%	127	-1,338	18,094
TOTAL DEFENSE WORKING CAPITAL FUND SUPPLIES AND MATERIALS	10,742	0		690	55,903	67,335		918	-9,189	59,064

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**Defense Health Program
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Summary of Price and Program Growth**

	<u>FY 2021 Program</u>	<u>Foreign Currency Rate Diff</u>	<u>Price Growth Percent</u>	<u>Price Growth</u>	<u>Program Growth</u>	<u>FY 2022 Program</u>	<u>Price Growth Percent</u>	<u>Price Growth</u>	<u>Program Growth</u>	<u>FY 2023 Program</u>
0502 ARMY FUND EQUIPMENT	0	0	0.00%	0	1,258	1,258	0.00%	0	-734	524
0503 NAVY FUND EQUIPMENT	0	0	0.00%	0	875	875	0.00%	0	4	879
0506 DLA MAT SUPPLY CHAIN (CONST & EQUIP)	0	0	0.00%	0	817	817	0.66%	5	9	831
0507 GSA MANAGED EQUIPMENT	0	0	0.00%	0	9,390	9,390	2.10%	197	732	10,319
TOTAL DEFENSE WORKING CAPITAL FUND EQUIPMENT PURCHASES	0	0		0	12,340	12,340		203	10	12,553
0611 NAVY SURFACE WARFARE CTR	0	0	0.00%	0	738	738	1.57%	12	9	759
0614 SPACE & NAVAL WARFARE CENTER	804	0	0.46%	4	5,806	6,614	2.82%	186	2,034	8,834
0631 NAVY BASE SUPPORT (NFESC)	345	0	4.17%	14	44,707	45,066	-0.43%	-195	-7,687	37,184
0633 DLA DOCUMENT SERVICES	0	0	0.00%	0	1,654	1,654	9.23%	153	-104	1,703
0647 DISA ENTERPRISE COMPUTING CENTERS	99,018	0	2.00%	1,980	-2,540	98,458	2.00%	1,969	-31,414	69,013
0671 DISA DISN SUBSCRIPTION SERVICES (DSS)	84,488	0	7.63%	6,446	-54,670	36,264	3.22%	1,167	-588	36,843
0675 DLA DISPOSITION SERVICES	0	0	0.00%	0	6	6	27.87%	2	-1	7
0677 DISA TELECOMM SVCS - REIMBURSABLE	21	0	0.49%	0	32	53	0.00%	0	1	54
0679 COST REIMBURSABLE PURCHASE	0	0	0.00%	0	1,104	1,104	0.00%	0	-692	412
0680 BUILDING MAINT FUND PURCH	46,130	0	1.00%	461	-2,832	43,759	1.38%	605	270	44,634
0691 DFAS FINANCIAL OPERATIONS (ARMY)	14,795	0	-2.84%	-420	2,333	16,708	3.58%	598	-259	17,047
0692 DFAS FINANCIAL OPERATIONS (NAVY)	17,374	0	-7.07%	-1,229	-8,387	7,758	3.32%	258	-1,128	6,888
0693 DFAS FINANCIAL OPERATIONS (AIR FORCE)	0	0	0.00%	0	3,366	3,366	8.25%	278	-211	3,433
0696 DFAS FINANCIAL OPERATION (OTHER DEFENSE AGENCIES)	21,216	0	10.38%	2,202	-13,478	9,940	5.47%	544	-2,696	7,788
TOTAL OTHER FUND PURCHASES	284,191	0		9,459	-22,162	271,488		5,576	-42,465	234,599

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	<u>FY 2021 Program</u>	<u>Foreign Currency Rate Diff</u>	<u>Price Growth Percent</u>	<u>Price Growth</u>	<u>Program Growth</u>	<u>FY 2022 Program</u>	<u>Price Growth Percent</u>	<u>Price Growth</u>	<u>Program Growth</u>	<u>FY 2023 Program</u>
0702 AMC SAAM (FUND)	0	0	0.00%	0	1	1	27.90%	0	-1	0
0706 AMC CHANNEL PASSENGER	38	0	3.00%	1	-39	0	0.00%	0	0	0
0707 AMC TRAINING	1,792	0	0.60%	11	-1,803	0	0.00%	0	0	0
0719 SDDC CARGO OPS-PORT HNDLG	0	0	0.00%	0	1,361	1,361	-11.60%	-158	51	1,254
0771 COMMERCIAL TRANSPORT	7,409	0	3.00%	222	5,175	12,806	0.00%	0	-1,319	11,487
TOTAL TRANSPORTATION	9,239	0		234	4,695	14,168		-158	-1,269	12,741
0901 FOREIGN NATIONAL INDIRECT HIRE (FNIH)	34,066	0	2.27%	773	8,662	43,501	2.10%	914	-4,075	40,340
0912 RENTAL PAYMENTS TO GSA (SLUC)	11,410	0	3.00%	342	10,656	22,408	2.10%	471	73	22,952
0913 PURCHASED UTILITIES (NON-FUND)	168,907	0	3.00%	5,067	88,423	262,397	2.10%	5,510	12,459	280,366
0914 PURCHASED COMMUNICATIONS (NON-FUND)	26,058	0	3.00%	782	31,600	58,440	2.10%	1,227	2,401	62,068
0915 RENTS (NON-GSA)	75,147	0	3.00%	2,254	-37,065	40,336	2.10%	847	-309	40,874
0917 POSTAL SERVICES (U.S.P.S)	1,850	0	3.00%	56	1,912	3,817	2.10%	80	-4	3,893
0920 SUPPLIES & MATERIALS (NON-FUND)	658,395	0	3.00%	19,752	-183,280	494,867	2.10%	10,392	-37,734	467,525
0921 PRINTING & REPRODUCTION	13,078	0	3.00%	392	2,971	16,441	2.10%	345	-47	16,739
0922 EQUIPMENT MAINTENANCE BY CONTRACT	144,952	0	3.00%	4,349	4,510	153,811	2.10%	3,230	-5,682	151,359
0923 FACILITIES SUST, REST, & MOD BY CONTRACT	644,965	0	3.00%	19,349	-194,861	469,453	2.10%	9,859	88,385	567,697
0924 PHARMACEUTICAL DRUGS	3,558,972	0	4.10%	145,918	114,755	3,819,645	4.00%	152,786	102,506	4,074,937
0925 EQUIPMENT PURCHASES (NON-FUND)	217,987	0	3.00%	6,540	354,497	579,024	2.10%	12,160	-21,917	569,267
0926 OTHER OVERSEAS PURCHASES	0	0	0.00%	0	38	38	2.10%	1	0	39
0930 OTHER DEPOT MAINTENANCE (NON-FUND)	1	0	3.00%	0	799	800	2.10%	17	-8	809
0932 MGT PROF SUPPORT SVCS	625,063	0	3.00%	18,752	-356,930	286,885	2.10%	6,025	7,017	299,927

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**Defense Health Program
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Summary of Price and Program Growth**

	<u>FY 2021 Program</u>	<u>Foreign Currency Rate Diff</u>	<u>Price Growth Percent</u>	<u>Price Growth</u>	<u>Program Growth</u>	<u>FY 2022 Program</u>	<u>Price Growth Percent</u>	<u>Price Growth</u>	<u>Program Growth</u>	<u>FY 2023 Program</u>
0933 STUDIES, ANALYSIS & EVAL	107,596	0	3.00%	3,228	-82,561	28,263	2.10%	594	-1,251	27,606
0934 ENGINEERING & TECH SVCS	51,424	0	3.00%	1,543	-47,964	5,003	2.10%	105	-61	5,047
0935 TRAINING AND LEADERSHIP DEVELOPMENT	0	0	0.00%	0	26	26	2.10%	1	0	27
0936 TRAINING AND LEADERSHIP DEVELOPMENT (OTHER CONTRACTS)	2,111	0	3.00%	63	-2,174	0	0.00%	0	0	0
0937 LOCALLY PURCHASED FUEL (NON-FUND)	40	0	3.00%	1	2,406	2,447	-7.47%	-183	209	2,473
0955 OTHER COSTS (MEDICAL CARE)	695,238	0	4.10%	28,505	-380,168	343,575	4.00%	13,743	218,318	575,636
0957 OTHER COSTS (LAND AND STRUCTURES)	264,852	0	3.00%	7,946	181,425	454,223	2.10%	9,539	-42,183	421,579
0959 OTHER COSTS (INSURANCE CLAIMS/INDMNTIES)	389	0	0.00%	0	-386	3	2.10%	0		3
0960 OTHER COSTS (INTEREST AND DIVIDENDS)	79,126	0	0.00%	0	-77,577	1,549	2.10%	33	1,425	3,007
0964 OTHER COSTS (SUBSISTENCE AND SUPPORT OF PERSONS)	6,147	0	3.00%	184	-2,829	3,502	2.10%	74	-5	3,571
0986 MEDICAL CARE CONTRACTS	15,262,516	3,335	4.10%	625,900	1,862,546	17,754,297	4.00%	710,172	-186,915	18,277,554
0987 OTHER INTRA-GOVT PURCH	359,335	0	3.00%	10,780	44,961	415,076	2.10%	8,717	16,803	440,596
0988 GRANTS	53,866	0	3.00%	1,616	-4,751	50,731	2.10%	1,065	-17,425	34,371
0989 OTHER SERVICES	601,471	5,878	3.00%	18,220	-356,936	268,633	2.10%	5,641	117,442	391,716
0990 IT CONTRACT SUPPORT SERVICES	1,424,808	0	3.00%	42,744	115,452	1,583,004	2.10%	33,243	-39,919	1,576,328
0991 FOREIGN CURRENCY VARIANCE	858	0	3.00%	26	-884	0	0.00%	0	0	0
TOTAL OTHER PURCHASES	25,090,628	9,213		965,082	1,097,272	27,162,195		986,605	209,506	28,358,306
GRAND TOTAL	31,586,128	9,213		1,116,478	1,251,167	33,962,986		1,256,025	95,739	35,314,750

1. FY 2021 actuals includes execution of \$663M Congressionally Approved reprogramming action to fund the Private Sector Care Shortfall (\$332,100K), COVID-19 Response Requirements (\$253,000K), and Desktop to Datacenter (D2D)/Med-COI requirements (\$78,000K) for delays due to the pandemic.
2. FY 2021 actuals excludes execution of DHP 1% Carryover Authority (\$313,615K).

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3. In FY 2021, the Department of Defense transferred O&M funding of \$137,000K to the Department of Veterans Affairs for the Joint Department of Defense - Department of Veterans Affairs Medical Facility Demonstration Fund (James A. Lovell Federal Health Care Center Great Lakes)(FHCC) established by section 1704 of Public Law 111-84 (National Defense Authorization Act for FY 2010). In FY 2022 the Department of Defense will transfer \$137,000K and in FY 2023 will transfer \$168,000K to the Department of Veterans Affairs for FHCC.
4. In FY 2021 the Department of Defense transferred O&M funding of \$15,000K to the Department of Veterans Affairs for the Joint Incentive Fund (JIF) as required by Section 8111 of Title 38 of the United States Code (USC) and Section 722 of Public Law 111-92 (National Defense Authorization Act for FY 2016). In FY 2022, the Department of Defense will transfer \$15,000K for JIF and in FY 2023 will also transfer \$15,000K for JIF.
5. FY 2021 actuals includes execution of \$354,322K for Overseas Contingency Operations (OCO).
6. FY 2021 actuals excludes execution of the Department of Defense Medicare-Eligible Retiree Health Care Fund (MERHCF) \$1,995,500K (O&M Only)

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**Defense Health Program
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Personnel Summary**

	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Change FY 2022/2023</u>
<u>Active Military End Strength (E/S) (Total)</u>	<u>71,318</u>	<u>71,865</u>	<u>70,422</u>	<u>-1,443</u>
Officer	26,404	27,372	26,467	-905
Enlisted	44,914	44,493	43,955	-538
 <u>Civilian End Strength (Total)</u>	 <u>57,849</u>	 <u>59,424</u>	 <u>60,122</u>	 <u>698</u>
U.S. Direct Hire	55,520	57,157	57,329	172
Foreign National Direct Hire	1,063	1,001	1,292	291
Total Direct Hire	56,583	58,158	58,621	463
Foreign National Indirect Hire	1,225	1,023	1,094	71
Reimbursable Civilian	41	243	407	164
 <u>Active Military Average Strength (A/S) (Total)</u>	 <u>72,450</u>	 <u>71,592</u>	 <u>71,143</u>	 <u>-449</u>
Officer	26,423	26,888	26,919	31
Enlisted	46,027	44,704	44,224	-480
 <u>Civilian FTEs (Total)</u>	 <u>55,896</u>	 <u>57,106</u>	 <u>57,395</u>	 <u>289</u>
U.S. Direct Hire	53,713	54,933	54,700	-233
Foreign National Direct Hire	1,086	952	1,217	265
Total Direct Hire	54,799	55,885	55,917	32
Foreign National Indirect Hire	1,051	983	1,076	93
Reimbursable Civilian	46	238	402	164
 Contractor FTEs (Total)	 23,470	 24,110	 23,679	 -431

Personnel Summary Explanations

1. "This exhibit represents the total civilian and contractor FTEs associated with the O&M/RDT&E, 0130D appropriation. FY2023 Overseas Operations Budget Request is accounted for in the Base Budget."

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Defense Health Program
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	<u>US Direct Hire</u>	<u>Direct Hire</u>	<u>Foreign National</u> <u>Indirect Hire</u>	<u>Total</u>
1. FY 2021 FTEs	53,759	1,086	1,051	55,896
Reflects increase civilian FTEs in support of Army Medical Research, Development & Acquisition Capabilities (MRDC), Program Executive Office (PEO), Deployment Health function (DH), AF Public Health Consolidation, The Sexual Assault program, and Military Manpower from Services to Defense Health Agency. This also reflect decreases as a results of Defense-wide review clean-up actions.	1,231	(99)	78	1,210
2. FY 2022 FTEs	54,990	987	1,129	57,106
Reflects increase civilian FTEs in support of Army Medical Research, Development & Acquisition Capabilities (MRDC), Program Executive Office (PEO), Deployment Health function (DH), AF Public Health Consolidation, The Sexual Assault program, and Military Manpower from Services to Defense Health Agency. This also reflect decreases as a results of Defense-wide review clean-up actions.	110	232	(53)	289
3. FY 2023 FTEs	55,100	1,219	1,076	57,395

Defense Health Program
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4. SUMMARY

FY 2021

O&M Total	53,759	1,086	1,051	55,896
Direct Funded	53,713	1,086	1,051	55,850
Reimbursable Funded	46	0	0	46

FY 2022

O&M Total	54,990	987	1,129	57,106
Direct Funded	54,933	952	983	56,868
Reimbursable Funded	57	35	146	238

FY 2023

O&M Total	55,100	1,219	1,076	57,395
Direct Funded	54,700	1,217	1,076	56,993
Reimbursable Funded	400	2	0	402

**Defense Health Program
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Summary of Funding Increases and Decreases**

	<u>O&M</u>	<u>RDT&E</u>	<u>Procurement</u>	<u>DHP Total</u>
FY 2022 President's Budget Request (Amended, if applicable)	34,182,719	630,680	779,008	35,592,407
In-House Care	9,720,004			9,720,004
Private Sector Care	18,092,679			18,092,679
Consolidated Health Support	1,541,122			1,541,122
Information Management	2,233,677			2,233,677
Management Activities	335,138			335,138
Education and Training	333,234			333,234
Base Operations/Communications	1,926,865			1,926,865
RDT&E		630,680		630,680
Procurement			779,008	779,008
1. Congressional Adjustments	-219,733	2,002,808	-20,300	1,762,775
a) Distributed Adjustments	-224,733	0	-20,300	-245,033
b) Undistributed Adjustments	0		0	0
c) Adjustments to Meet Congressional Intent	0	2,002,808		2,002,808
d) General Provisions	5,000	0	0	5,000
FY 2022 Appropriated Amount	33,962,986	2,633,488	758,708	37,355,182
In-House Care	9,566,792			9,566,792
Private Sector Care	17,977,979			17,977,979
Consolidated Health Support	1,514,397			1,514,397
Information Management	2,231,149			2,231,149
Management Activities	333,138			333,138
Education and Training	340,734			340,734
Base Operations/Communications	1,998,797			1,998,797
RDT&E		2,633,488		2,633,488
Procurement			758,708	758,708
2. OCO and Other Supplemental Enacted	0	0	0	0
a) OCO and Other Supplemental Requested	0	0	0	0
3. Fact-of-Life Changes	0	0	0	0
a) Functional Transfers	0	0	0	0
1. Transfers In	0	0	0	0
2. Transfers Out	0	0	0	0
b) Technical Adjustments	0	0	0	0
1. Increases	0	0	0	0
2. Decreases	0	0	0	0

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Summary of Funding Increases and Decreases**

	<u>O&M</u>	<u>RDT&E</u>	<u>Procurement</u>	<u>DHP Total</u>
c) Emergent Requirements	0	0	0	0
1. Program Increases	0	0	0	0
a) One-Time Costs	0	0	0	0
b) Program Growth	0	0	0	0
2. Program Reductions	0	0	0	0
a) One-Time Costs	0	0	0	0
b) Program Decreases	0	0	0	0
FY 2022 Baseline Funding	33,962,986	2,633,488	758,708	37,355,182
In-House Care	9,566,792			9,566,792
Private Sector Care	17,977,979			17,977,979
Consolidated Health Support	1,514,397			1,514,397
Information Management	2,231,149			2,231,149
Management Activities	333,138			333,138
Education and Training	340,734			340,734
Base Operations/Communications	1,998,797			1,998,797
RDT&E		2,633,488		2,633,488
Procurement			758,708	758,708
4. Reprogramming	0	0	0	0
a) Increases	0	0	0	0
b) Decreases	0	0	0	0
Revised FY 2022 Estimate	33,962,986	2,633,488	758,708	37,355,182
In-House Care	9,566,792			9,566,792
Private Sector Care	17,977,979			17,977,979
Consolidated Health Support	1,514,397			1,514,397
Information Management	2,231,149			2,231,149
Management Activities	333,138			333,138
Education and Training	340,734			340,734
Base Operations/Communications	1,998,797			1,998,797
RDT&E		2,633,488		2,633,488
Procurement			758,708	758,708
5. Less: OCO and Other Supplemental Appropriations and Reprogrammings (items 2 and 4)	0	0	0	0
a) OCO and Other Supplemental Requested	0	0	0	0
FY 2022 Normalized Current Estimate	33,962,986	2,633,488	758,708	37,355,182

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Summary of Funding Increases and Decreases**

	<u>O&M</u>	<u>RDT&E</u>	<u>Procurement</u>	<u>DHP Total</u>
In-House Care	9,566,792			9,566,792
Private Sector Care	17,977,979			17,977,979
Consolidated Health Support	1,514,397			1,514,397
Information Management	2,231,149			2,231,149
Management Activities	333,138			333,138
Education and Training	340,734			340,734
Base Operations/Communications	1,998,797			1,998,797
RDT&E		2,633,488		2,633,488
Procurement			758,708	758,708
6. Price Change	1,256,030	14,600	23,200	1,293,830
7. Functional Transfers	303,572	281,298	0	584,870
a) Transfers In	435,906	281,298	0	717,204
b) Transfers Out	-132,334	0	0	-132,334
8. Program Increases	641,877	27,300	32,506	701,683
a) Annualization of New FY 2022 Program	0	0	0	0
b) One-Time FY 2023 Increases	0	0	0	0
c) Program Growth in FY 2023	641,877	27,300	32,506	701,683
9. Program Decreases	-849,715	-2,046,692	-244,340	-3,140,747
a) Annualization of FY 2022 Program Decreases	0	0	0	0
b) One-Time FY 2022 Increases	-85,500	-2,002,808	0	-2,088,308
c) Program Decreases in FY 2023	-764,215	-43,884	-244,340	-1,052,439
FY 2023 Budget Request	35,314,750	909,994	570,074	36,794,818
In-House Care	9,906,943			9,906,943
Private Sector Care	18,455,209			18,455,209
Consolidated Health Support	1,916,366			1,916,366
Information Management	2,251,151			2,251,151
Management Activities	338,678			338,678
Education and Training	334,845			334,845
Base Operations/Communications	2,111,558			2,111,558
RDT&E		909,994		909,994
Procurement			570,074	570,074

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I. Description of Operations Financed:

This Budget Activity Group provides for the delivery of medical and dental care plus pharmaceuticals received by Department of Defense eligible beneficiaries in Military Treatment Facilities and Dental Treatment Facilities in the Continental United States (CONUS) and Outside the Continental United States (OCONUS). This program includes the following:

Care in Department of Defense Medical Centers, Hospitals and Clinics - Includes resources for the provision of healthcare in DoD-owned and operated CONUS and OCONUS Military Treatment Facilities which are staffed, and equipped to provide inpatient care for both surgical and medical patients and/or outpatient care for ambulatory patients.

Dental Care - Includes resources for the provision of dental care and services in CONUS and OCONUS to authorized personnel through the operation of hospital departments of dentistry and installation dental clinics, and the operation of Regional Dental Activities.

Pharmaceuticals - Includes pharmaceuticals specifically identified and provided by Pharmacy Services in DoD owned and operated CONUS and OCONUS facilities. Excludes the cost of operating Pharmacy Services in the Military Treatment Facilities.

II. Force Structure Summary:

The In-House Care Budget Activity Group includes staffing in Military Treatment Facilities to provide the full range of inpatient and ambulatory medical and dental care services. In addition to medical and dental care, this Budget Activity Group also includes medical center laboratories, substance abuse programs, facility on-the-job training/education programs and federal health care sharing agreements. This Budget Activity Group excludes operation of management headquarters, TRICARE Regional Offices, deployable medical and dental units and health care resources devoted exclusively to teaching organizations.

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III. Financial Summary (\$ in Thousands):

	FY 2022						FY 2023 Request
	FY 2021 Actuals	Budget Request	Congressional Action		Current Enacted		
A. BA Subactivities			Amount	Percent	Appropriated		
1. MEDCENS, Hospitals & Clinics (CONUS)	\$6,786,241	\$7,036,148	\$-153,212	-2.18%	\$6,882,936	\$6,882,936	\$7,125,193
2. MEDCENS, Hospitals & Clinics (OCONUS)	\$552,714	\$524,277	\$0	0.00%	\$524,277	\$524,277	\$525,857
3. Pharmaceuticals (CONUS)	\$1,333,565	\$1,515,825	\$0	0.00%	\$1,515,825	\$1,515,825	\$1,592,708
4. Pharmaceuticals (OCONUS)	\$149,767	\$151,875	\$0	0.00%	\$151,875	\$151,875	\$158,432
5. Dental Care (CONUS)	\$415,999	\$452,109	\$0	0.00%	\$452,109	\$452,109	\$465,615
6. Dental Care (OCONUS)	\$35,248	\$39,770	\$0	0.00%	\$39,770	\$39,770	\$39,138
Total	\$9,273,534	\$9,720,004	\$-153,212	-1.58%	\$9,566,792	\$9,566,792	\$9,906,943

1. FY 2021 actuals includes \$55,977K for Overseas Contingency Operations (OCO) costs.
2. FY 2021 actuals includes \$231,000K Reprogramming approved by Congress to fund critical COVID-19 requirements.
3. FY 2021 actuals excludes Department of Defense (DoD) Medicare-Eligible Retiree Health Care Fund (MERHCF) of \$1,994,500K (O&M only).
4. FY 2022 enacted includes \$63,200K for Direct War costs accounted for in the base.
5. FY 2022 enacted excludes anticipated DoD MERHCF receipts of \$1,830,400K (O&M only).
6. FY 2023 estimate includes \$28,235K for Overseas Operations Costs accounted for in the base.
7. FY 2023 estimate excludes anticipated DoD MERHCF receipts of \$1,939,700K (O&M only).

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III. Financial Summary (\$ in Thousands): (Cont.)

<u>B. Reconciliation Summary</u>	<u>Change FY 2022/FY 2022</u>	<u>Change FY 2022/FY 2023</u>
BASELINE FUNDING	\$9,720,004	\$9,566,792
Congressional Adjustments (Distributed)	-153,212	
Congressional Adjustments (Undistributed)	0	
Adjustments to Meet Congressional Intent	0	
Congressional Adjustments (General Provisions)	0	
SUBTOTAL APPROPRIATED AMOUNT	9,566,792	
Fact-of-Life Changes (2022 to 2022 Only)	0	
SUBTOTAL BASELINE FUNDING	9,566,792	
Supplemental	0	
Reprogrammings	0	
Price Changes		365,177
Functional Transfers		24,718
Program Changes		-49,744
CURRENT ESTIMATE	9,566,792	9,906,943
Less: Supplemental	0	
NORMALIZED CURRENT ESTIMATE	\$9,566,792	\$9,906,943

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III. Financial Summary (\$ in Thousands): (Cont.)

FY 2022 President's Budget Request (Amended, if applicable)	\$9,720,004
1. Congressional Adjustments	\$-153,212
a) Distributed Adjustments.....	\$-153,212
1) a. Telehealth for Military Children and Families:	\$5,000
2) b. Medical Reform Implementation:.....	\$-104,462
3) c. Unjustified Growth:	\$-27,800
4) d. Excess Growth - Medical Care Contracts:	\$-25,950
b) Undistributed Adjustments.....	\$0
c) Adjustments to Meet Congressional Intent.....	\$0
d) General Provisions	\$0
FY 2022 Appropriated Amount	\$9,566,792
2. Supplemental Appropriations	\$0
a) Supplemental Funding.....	\$0
3. Fact-of-Life Changes.....	\$0
a) Functional Transfers.....	\$0

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III. Financial Summary (\$ in Thousands): (Cont.)

b) Technical Adjustments	\$0
c) Emergent Requirements	\$0
FY 2022 Baseline Funding.....	\$9,566,792
4. Reprogrammings (Requiring 1415 Actions)	\$0
a) Increases	\$0
b) Decreases	\$0
Revised FY 2022 Estimate.....	\$9,566,792
5. Less: Item 2, Supplemental Appropriation and Item 4, Reprogrammings	\$0
a) Less: Supplemental Funding	\$0
FY 2022 Normalized Current Estimate	\$9,566,792
6. Price Change	\$365,177
7. Functional Transfers	\$24,718
a) Transfers In	\$72,946
1) a. Deployment Health Transfer to the Defense Health Agency:	\$72,946
<p style="margin-left: 40px;">Transfers Department of the Army Deployment Health Programs and associated funding and FTEs (+\$72,946K; +107 FTEs) to the Defense Health Agency, In-House Care. Transfer allows Army Medical Senior Leaders to retain responsibility for planning and requirements submissions for Deployment Health that directly aligns to Soldier Readiness.</p>	

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III. Financial Summary (\$ in Thousands): (Cont.)

b) Transfers Out..... \$-48,228

1) a. Medical Readiness Transfer to the Military Departments: \$-48,228

In accordance with the FY 2021 Secretary of Defense Memo, Department of Defense Reform Focus in 2020, the Defense Health Program continues the transfer of the Army's Medical Readiness activities, which occur outside of the Military Treatment Facilities to the Department of the Army. The Defense Health Agency transfers (-\$48,228K and -538 FTES) to the Department of the Army for: Management and administration of the Office of Soldier Counsel, Troop Command, and Plans, Training, Mobilization and Security readiness programs (-\$43,024K; -483 FTES); Readiness Functions of the Army Medicine Regional Public Health and Dental Commands (-\$3,200K; -26 FTES); and Army Medical Readiness (-\$2,004K; -29 FTES).

8. Program Increases..... \$177,122

a) Annualization of New FY 2022 Program \$0

b) One-Time FY 2023 Increases \$0

c) Program Growth in FY 2023 \$177,122

1) a. Executive Order Minimum Wage Adjustment for Federal Contractors: \$155,880

Additional funding to address the estimated impacts of Executive Order (E.O.) 14026, Increasing the Minimum Wage for Federal Contractors, dated April 27, 2021. E.O. 14026, Section 4(a) requires the Department of Labor to implement regulations to increase the minimum wage to \$15 per hour by January 30, 2022, on contracts covered by the Fair Labor Standards Act, the Service Contract Act (SCA), or the Davis Bacon Act (DBA). The E.O. also applies only to Federal Contractors and Subcontractors on new contract actions entered into on or after January 30, 2022. In the Consolidated Health Support Budget Activity Group, the increase was applied to the following OP-32 lines: 923, 955, 960, 986 and 989. The FY 2022 In-House Care baseline funding is \$9,566,792K. The FY 2022 In-House Care baseline contractor staffing is 14,518 CMEs.

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III. Financial Summary (\$ in Thousands): (Cont.)

<p>2) b. Anomalous Health Incidents:.....</p> <p>Funding supports the FY 2022 NDAA (P. L. 117-81, Sec 732, 10 U. S. C. 1071 note), Access by United States Government Employees and their Family Members to Certain Facilities of Department of Defense for Assessment and Treatment of Anomalous Health Conditions, which ensures that individuals affected by anomalous health incidents (as defined by the Secretary of Defense) receive timely and comprehensive health care and treatment. Funding increases medical care contracts in the In-House Care program element. The FY 2022 In-House Care baseline funding is \$9,566,792K. The FY 2022 In-House Care baseline contractor staffing is 14,518 CMEs.</p>	\$21,242
<p>3) c. Overseas Operations Costs Accounted for in the Base:</p> <p>Overseas Operations Costs of \$28,235K is included in the FY 2023 In-House Care baseline request. This funding directly supports pre/post deployment activities such as medical records reviews, hearing and vision exams, medical evaluations, pharmaceutical immunizations and behavioral health screening for all deploying and returning soldiers. Funding also supports backfill of deployed personnel with medical staff to sustain the delivery of patient care in Military Medical Treatment Facilities (MTFs). The FY 2022 In-House Care baseline funding is \$9,566,792K.</p>	\$0
<p>4) d. Downsizing 50 Medical Treatment Facilities:</p> <p>Maintains funding due to fact-of-life delays associated with implementing elements of medical business reforms identified in the Defense Wide Review and which were included in the PB 2021 submission. Market assessments for each military treatment facility will be revalidated taking into consideration any local healthcare market changes. The FY 2022 In-House Care baseline budget is \$9,566,792K.</p>	\$0
<p>5) e. Hospitals at Naples and Sigonella:.....</p> <p>Maintains funds in the MEDCENS, Hospitals and Clinics (OCONUS) program element that were reduced in the FY 2021 Defense Wide Review for the elimination of inpatient services at Naples and Sigonella. The FY 2022 In-House Care baseline funding request is \$9,566,792K.</p>	\$0
<p>9. Program Decreases</p>	\$-226,866
<p style="padding-left: 20px;">a) Annualization of FY 2022 Program Decreases</p>	\$0
<p style="padding-left: 20px;">b) One-Time FY 2022 Increases</p>	\$0

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III. Financial Summary (\$ in Thousands): (Cont.)

c) Program Decreases in FY 2023 \$-226,866

1) a. Central Contracts Realigned to the Defense Health Agency: \$-137,199

Realigns funding from In-House Care to Consolidated Health Support for the execution of central contracts within the Defense Health Agency, following the realignment of the management and administration of the Military Treatment Facilities to the Defense Health Agency. The FY 2022 In-House Care baseline funding is \$9,566,792K. The FY 2022 In-House Care baseline contractor staffing is 14,518 CMEs.

2) b. Reduced Requirements for COVID-19:..... \$-56,005

The FY 2023 reduction in COVID funding assumes that future outbreaks in COVID variants will be less extensive and less severe due to increased vaccination/natural immunity as we have seen with the Omicron variant, which had less hospitalization costs and more outpatient care. The FY 2022 In-House Care baseline is \$9,566,792K.

3) c. Information Management/Informational Technology (IM/IT) Resources Realigned to Health Information Technology: \$-33,662

Realigns funding and FTEs (-\$33,662K; -\$281 FTEs) from In-House Care to Service Medical IM/IT for identified IT support FTEs assigned to each Military Treatment Facility. The FY 2022 In-House Care baseline funding is \$9,566,792K. The FY 2022 In-House Care baseline staffing is 45,847 FTEs.

FY 2023 Budget Request \$9,906,943

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IV. Performance Criteria and Evaluation Summary:

	<u>FY 2021 Actuals</u>	<u>FY 2022 Estimate</u>	<u>FY 2023 Estimate</u>	<u>FY 2021-2022 Change</u>	<u>FY 2022-2023 Change</u>
<u>Population - Eligible Beneficiaries, CONUS</u>					
Active Duty	1,451,003	1,451,878	1,434,145	875	-17,733
Active Duty Family Members	1,809,017	1,813,572	1,793,550	4,555	-20,022
Retirees	1,011,787	1,009,454	1,007,610	-2,333	-1,844
Family Members of Retirees	2,411,285	2,408,272	2,405,794	-3,013	-2,478
Subtotal Eligible	6,683,092	6,683,176	6,641,099	84	-42,077
Medicare Eligible Beneficiaries	2,410,371	2,433,696	2,455,106	23,325	21,410
Total Eligible Beneficiaries	9,093,463	9,116,872	9,096,205	23,409	-20,667
<u>Population - Eligible Beneficiaries, OCONUS</u>					
Active Duty	178,821	178,744	175,589	-77	-3,155
Active Duty Family Members	127,858	128,032	125,753	174	-2,279
Retirees	26,400	26,317	26,249	-83	-68
Family Members of Retirees	83,524	83,273	83,071	-251	-202
Subtotal Eligible	416,603	416,366	410,662	-237	-5,704
Medicare Eligible Beneficiaries	92,262	93,233	94,110	971	877
Total Eligible Beneficiaries	508,865	509,599	504,772	734	-4,827
<u>Population - Eligible Beneficiaries, Worldwide</u>					
Active Duty	1,630,469	1,631,266	1,610,375	797	-20,891
Active Duty Family Members	1,936,875	1,941,603	1,919,303	4,728	-22,300
Retirees	1,038,187	1,035,771	1,033,859	-2,416	-1,912
Family Members of Retirees	2,494,809	2,491,545	2,488,864	-3,264	-2,681
Subtotal Eligible	7,100,340	7,100,185	7,052,401	-155	-47,784
<u>Medicare Eligible Beneficiaries:</u>					
Active Duty Family Members	4,650	4,652	4,597	2	-55
Guard/Reserve Family Members	1,559	1,580	1,583	21	3
Eligible Retirees	1,210,777	1,225,743	1,238,969	14,966	13,226
Eligible Family Members of Retirees	782,322	791,880	800,355	9,558	8,475
Survivors	500,547	500,296	500,937	-251	641
Others	2,133	2,133	2,133	0	0
Total Medicare Eligible Beneficiaries	2,501,988	2,526,284	2,548,574	24,296	22,290
Total Eligible Beneficiaries	9,602,328	9,626,469	9,600,975	24,141	-25,494

Notes:

1. FY 2022 - 2023 estimates are projected numbers of MHS eligible beneficiaries and are based on (a) future Budget End Strengths of Active Duty and Active Guard/Reserve members and (b) the DoD's Actuary's projection of retirees.
2. Active Duty and Active Duty Guard/Reserve beneficiaries were excluded from being counted as Medicare Eligible.

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IV. Performance Criteria and Evaluation Summary:

3. The US "Medicare Eligible Beneficiaries" are: Active Duty Family Members, Guard/Reserve Family Members, Eligible Retirees, Eligible Family Members of Retirees, Inactive Guard/Reserve, Inactive Guard/Reserve Family Members, Survivors, and Others.
4. The Worldwide "Eligible Family Members of Retirees" are: Family Members of Retirees, Inactive Guard/Reserves, and Inactive Guard/Reserve Family Members.

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IV. Performance Criteria and Evaluation Summary:

	<u>FY 2021 Actuals</u>	<u>FY 2022 Estimate</u>	<u>FY 2023 Estimate</u>	<u>FY 2021-2022 Change</u>	<u>FY 2022-2023 Change</u>
<u>Enrollees - Direct Care</u>					
TRICARE Region - East	1,692,489	1,692,452	1,681,062	-37	-11,390
TRICARE Region - West	959,851	959,830	953,370	-21	-6,460
TRICARE Region - Europe	114,546	114,544	113,773	-2	-771
TRICARE Region - Pacific	130,720	130,717	129,837	-3	-880
TRICARE Region - Latin America	2,245	2,245	2,230	0	-15
Alaska	51,434	51,433	51,087	-1	-346
Sub-Total CONUS Regions	<u>2,703,774</u>	<u>2,703,715</u>	<u>2,685,519</u>	<u>-59</u>	<u>-18,196</u>
Sub-Total OCONUS Regions	<u>247,511</u>	<u>247,506</u>	<u>245,840</u>	<u>-5</u>	<u>-1,666</u>
Total Direct Care Enrollees	<u>2,951,285</u>	<u>2,951,221</u>	<u>2,931,359</u>	<u>-64</u>	<u>-19,862</u>

Notes:

1. FY 2022 enrollee estimates include Direct War projections as this funding is in the FY 2022 base.
2. FY 2022 estimates are updated since the President's Budget submission. These figures are based on current data and trends analysis that was used in the forecasts for the FY 2023 estimates.

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IV. Performance Criteria and Evaluation Summary:

	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2021-2022 Change</u>	<u>FY 2022-2023 Change</u>
<u>Direct Care System Workload (from M2 and Business Planning Tool)</u>					
Inpatient Admissions, Non-Weighted (SIDR Dispositions-All)	141,514	141,958	139,965	444	-1,993
Inpatient Admissions, Occupied Bed Days (Mental Health Only)	73,477	73,708	72,673	231	-1,035
Average Length of Stay (ALL Bed Days/All Dispositions)	3	3	3	0	0
Ambulatory Visits, Non-Weighted (Encounters, CAPER)	34,560,893	34,669,396	34,182,568	108,503	-486,828
Number of Outpatient Pharmacy Prescriptions (30-Day equivalents)	33,111,030	34,183,768	34,598,299	1,072,738	414,531

Notes:

1. Data source is MHS Mart (M2).
2. Data excludes Inpatient Admission, Weighted (MS-DRG RWPs, Non Mental Health), Ambulatory Visits, Weighted (Adj Provider Aggregate RVUs, CAPER), and Ambulatory Procedures, Weighted (Aggregate Weighted APCs, CAPER) due to data quality issues with the Weighted values in M2 from MHS GENESIS sites.
3. Workload excludes Tricare for Life (TFL) patients.
4. Data Source for Number of Outpatient Pharmacy Prescriptions (30-day equivalents) is the Pharmacy Data Transcription Service (PDTS) database.
5. FY 2022 workload estimate includes Direct War projections as this funding is in the FY 2022 base.
6. FY 2022 estimates are updated since the President's Budget submission. These figures are based on current data and trends analysis that was used in the forecasts for the FY 2023 estimates.

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IV. Performance Criteria and Evaluation Summary:

	<u>FY 2021 Actuals</u>	<u>FY 2022 Estimate</u>	<u>FY 2023 Estimate</u>	<u>FY 2021-2022 Change</u>	<u>FY 2021-2023 Change</u>
<u>Dental Workload (Dental Weighted Values (DWVs)(from Components)</u>					
CONUS	9,702,935	9,721,978	9,735,918	19,043	13,940
OCONUS	2,206,635	2,177,923	2,079,443	-28,712	-98,480
Total DWVs	11,909,570	11,899,901	11,815,361	-9,669	-84,540
<u>CONUS</u>					
Active Duty	9,114,620	9,150,515	9,163,636	35,895	13,121
Non-Active Duty	588,315	571,463	572,282	-16,852	819
Total CONUS	9,702,935	9,721,978	9,735,918	19,043	13,940
<u>OCONUS</u>					
Active Duty	1,806,770	1,786,052	1,705,291	-20,718	-80,761
Non-Active Duty	399,865	391,871	374,152	-7,994	-17,719
Total OCONUS	2,206,635	2,177,923	2,079,443	-28,712	-98,480

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V. Personnel Summary:

	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Change FY 2021/ FY 2022</u>	<u>Change FY 2022/ FY 2023</u>
Active Military End Strength (E/S) (Total)	49,155	48,292	51,731	-863	3,439
Officer	16,694	17,144	18,375	450	1,231
Enlisted	32,461	31,148	33,356	-1,313	2,208
Active Military Average Strength (A/S) (Total)	49,239	48,724	50,012	-515	1,288
Officer	16,448	16,919	17,760	471	841
Enlisted	32,791	31,805	32,252	-986	447
Civilian FTEs (Total)	45,251	45,847	44,792	596	-1,055
U.S. Direct Hire	43,617	44,261	43,088	644	-1,173
Foreign National Direct Hire	788	679	812	-109	133
Total Direct Hire	44,405	44,940	43,900	535	-1,040
Foreign National Indirect Hire	846	907	892	61	-15
Average Annual Civilian Salary (\$ in thousands)	107.9	108.2	113.9	0.3	5.8
Contractor FTEs (Total)	14,531	14,518	14,515	-13	-3

Personnel Summary Explanations:

Explanation of changes in Active Military End Strength: The net decrease from FY 2021 to FY 2022 (-863) reflects execution adjustments (-3,561: Air Force -2,537; Navy -550 and Army -474) and includes the technical adjustment made by the military departments for the revised drawdown reductions (+2698: Air Force: +1,661; Army: +1,102; Navy: -65;) to comply with Section 719 of the FY 2020 National Defense Authorization Act (NDAA) that limits the realignment or reduction of military medical E/S authorizations and to reflect executable Service plans for the drawdown. The net increase from FY 2022 to FY 2023 (+3,439) includes continued technical adjustments made by the military departments for the revised drawdown reductions including the following restoral (+2,542: Navy: +2,491; Army: +95; Air Force: -44) to comply with Section 731 of the FY 2022 National Defense Authorization Act (NDAA) that delays the divestiture of the military drawdown. In addition, adjustments by component include: Army (+744): Transfer of the following programs to the Department of the Army: 1) In-Military Treatment Facility (MTF) Army Readiness Programs (-237); 2) Defense Wide Review Army Readiness (-39); 3) Public Health Command and Regional Dental Command (-17); as well as the addition of Army Student RICs (+1,038); and an Army technical correction to align Agency controls with Service controls in the

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V. Personnel Summary: (Cont.)

CAPE system that accounts for manpower (-1). Navy (+225): Transfer of Navy BUMED resources to the Department of the Navy for the following programs: 1) Medical Sealift Command (-73); 2) Research and Development Lab (-20); 3) Carrier Support (-10); 4) Medical Headquarters (-1); and internal realignment from other BAGs (+329). Air Force (-72): Transfer of non-MTF resources to the Department of the Air Force (-72).

Explanation of changes in Civilian FTEs: The net increase from FY 2021 to FY 2022 (596) reflects FY 2021 execution adjustments (596: Army +2522; DCFM - 975, Air Force -689, and Navy -262) based on FY 2021 actual FTE execution. The net decrease from FY 2022 to FY 2023 (-1,055) reflects the following changes by component: Direct Health Agency (+107): Transfer of the Army's Deployment Health Program to Defense Health Agency. Navy (+116): realignment of IM/IT resources to Health Information Technology (-8); and Navy internal realignment to other Bags (+124). Air Force (+86): Internal realignment from other BAGs. Army (-1,364): Transfer of the following programs to the Department of the Army: 1) In-Medical Treatment Facility Readiness Programs (-483); 2) FTE only transfer for Family Advocacy Program (-326); 3) Army Medical Readiness (-29); 4) Readiness Functions of the Army Medicine Regional Dental Commands (-26); as well as realignment of IM/IT resources to Health Information Technology (-281); and internal realignments to other BAGs (-219).

Explanation of changes in Contractor FTEs: The decrease from FY2021 to FY2022 (-13) is accounted for in the MEDCENS, Hospitals, Clinics CONUS (-4), MEDCENS, Hospitals and, Clinics OCONUS (-7), Dental Care CONUS (-3), and Dental Care OCONUS program elements (+1) and are attributed to actual execution within the In-House Care programs and the net impact of the transfer of contract resources from the Services to the Defense Health Agency (DHA). The decrease from FY2022 to FY2023 (-3) is accounted for in MEDCENS, Hospitals, Clinics CONUS (+27), Dental Care CONUS (+33), and MEDCENS, Hospitals and, Clinics OCONUS (-63) and are attributed to Enterprise-wide DHP Reform Management efforts to shape the DHP workforce.

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VI. OP 32 Line Items as Applicable (Dollars in thousands):

	FY 2021 <u>Program</u>	<u>Change from FY 2021 to FY 2022</u>			FY 2022 <u>Program</u>	<u>Change from FY 2022 to FY 2023</u>		FY 2023 <u>Program</u>
		<u>FC Rate Diff</u>	<u>Price Growth</u>	<u>Program Growth</u>		<u>Price Growth</u>	<u>Program Growth</u>	
101 EXEC, GEN'L & SPEC SCHEDS	4,727,039	0	107,304	-51,410	4,782,933	197,296	-57,285	4,922,944
103 WAGE BOARD	87,221	0	1,980	18,590	107,791	4,446		112,237
104 FN DIRECT HIRE (FNDH)	38,196	0	867	-5,822	33,241	1,371		34,612
105 SEPARATION LIABILITY (FNDH)	1,021	0	23	211	1,255	52	-1,307	0
107 VOLUNTARY SEP INCENTIVES	812	0	18	12	842	35	-524	353
0199 TOTAL CIVILIAN PERSONNEL COMPENSATION	4,854,289	0	110,192	-38,419	4,926,062	203,200	-59,116	5,070,146
308 TRAVEL OF PERSONS	41,068	0	1,232	29,679	71,979	1,512	-2,647	70,844
0399 TOTAL TRAVEL	41,068	0	1,232	29,679	71,979	1,512	-2,647	70,844
401 DLA ENERGY (FUEL PRODUCTS)	2,621	0	265	-2,654	232	-17	-37	178
402 SERVICE FUND FUEL	1	0	0	8	9	0	-2	7
411 ARMY SUPPLY	0	0	0	500	500	-1	-499	0
412 NAVY MANAGED SUPPLY, MATL	0	0	0	556	556	33	-34	555
416 GSA SUPPLIES & MATERIALS	1,544	0	46	6,441	8,031	169	-484	7,716
417 LOCAL PURCH SUPPLIES & MAT	0	0	0	26,454	26,454	556	-6,407	20,603
422 DLA MAT SUPPLY CHAIN (MEDICAL)	2,152	0	4	14,647	16,803	111	-1,270	15,644
0499 TOTAL DEFENSE WORKING CAPITAL FUND SUPPLIES AND MATERIALS	6,318	0	315	45,952	52,585	851	-8,733	44,703
502 ARMY FUND EQUIPMENT	0	0	0	1,258	1,258	0	-734	524
503 NAVY FUND EQUIPMENT	0	0	0	180	180	0	5	185
506 DLA MAT SUPPLY CHAIN (CONST & EQUIP)	0	0	0	187	187	1	-4	184
507 GSA MANAGED EQUIPMENT	0	0	0	8,617	8,617	181	-200	8,598
0599 TOTAL DEFENSE WORKING CAPITAL FUND EQUIPMENT PURCHASES	0	0	0	10,242	10,242	182	-933	9,491
611 NAVY SURFACE WARFARE CTR	0	0	0	738	738	12	9	759
633 DLA DOCUMENT SERVICES	0	0	0	1,597	1,597	147	-99	1,645
677 DISA TELECOMM SVCS - REIMBURSABLE	21	0	0	32	53	0	1	54

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VI. OP 32 Line Items as Applicable (Dollars in thousands):

	FY 2021 Program	Change from FY 2021 to FY 2022			FY 2022 Program	Change from FY 2022 to FY 2023		FY 2023 Program
		FC Rate Diff	Price Growth	Program Growth		Price Growth	Program Growth	
0699 TOTAL OTHER FUND PURCHASES	21	0	0	2,367	2,388	159	-89	2,458
706 AMC CHANNEL PASSENGER	36	0	1	-37	0	0	0	0
707 AMC TRAINING	41	0	0	-41	0	0	0	0
719 SDDC CARGO OPS-PORT HNDLG	0	0	0	21	21	-2	-9	10
771 COMMERCIAL TRANSPORT	6,107	0	183	2,672	8,962	0	-1,396	7,566
0799 TOTAL TRANSPORTATION	6,184	0	184	2,615	8,983	-2	-1,405	7,576
901 FOREIGN NATIONAL INDIRECT HIRE (FNIH)	28,382	0	644	3,592	32,618	685	0	33,303
912 RENTAL PAYMENTS TO GSA (SLUC)	928	0	28	-927	29	1	-2	28
913 PURCHASED UTILITIES (NON-FUND)	153	0	5	-158	0	0	0	0
914 PURCHASED COMMUNICATIONS (NON-FUND)	2,840	0	85	-2,159	766	16	-21	761
915 RENTS (NON-GSA)	9,098	0	273	4,336	13,707	288	389	14,384
917 POSTAL SERVICES (U.S.P.S)	342	0	10	809	1,161	24		1,185
920 SUPPLIES & MATERIALS (NON-FUND)	580,410	0	17,412	-247,472	350,350	7,357	-33,266	324,441
921 PRINTING & REPRODUCTION	5,112	0	153	-1,735	3,530	74	-58	3,546
922 EQUIPMENT MAINTENANCE BY CONTRACT	135,014	0	4,050	-321	138,743	2,914	-7,251	134,406
923 FACILITIES SUST, REST, & MOD BY CONTRACT	219,155	0	6,575	-140,655	85,075	1,787	16,161	103,023
924 PHARMACEUTICAL DRUGS	1,483,332	0	60,817	123,551	1,667,700	66,708	16,732	1,751,140
925 EQUIPMENT PURCHASES (NON-FUND)	116,637	0	3,499	240,885	361,021	7,581	-20,344	348,258
932 MGT PROF SUPPORT SVCS	143,459	0	4,304	-134,373	13,390	281	-561	13,110
933 STUDIES, ANALYSIS & EVAL	41,062	0	1,232	-35,979	6,315	133	-678	5,770
934 ENGINEERING & TECH SVCS	728	0	22	-750	0	0	0	0
937 LOCALLY PURCHASED FUEL (NON-FUND)	1	0	0	362	363	-27	38	374
955 OTHER COSTS (MEDICAL CARE)	408,317	0	16,741	-127,783	297,275	11,891	-49,673	259,493
959 OTHER COSTS (INSURANCE CLAIMS/INDMNTIES)	289	0	0	-289	0	0	0	0
960 OTHER COSTS (INTEREST AND DIVIDENDS)	48,340	0	0	-48,340	0	0	1	1
964 OTHER COSTS (SUBSISTENCE AND SUPPORT OF PERSONS)	5,675	0	170	-3,309	2,536	53	-2	2,587
986 MEDICAL CARE CONTRACTS	939,376	3,335	38,651	470,630	1,451,992	58,080	100,326	1,610,398

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VI. OP 32 Line Items as Applicable (Dollars in thousands):

	FY 2021 <u>Program</u>	Change from FY 2021 to FY 2022			FY 2022 <u>Program</u>	Change from FY 2022 to FY 2023		FY 2023 <u>Program</u>
		FC Rate <u>Diff</u>	Price <u>Growth</u>	Program <u>Growth</u>		Price <u>Growth</u>	Program <u>Growth</u>	
987 OTHER INTRA-GOVT PURCH	20,254	0	608	7,210	28,072	590	-497	28,165
988 GRANTS	6,128	0	184	-4,944	1,368	29	560	1,957
989 OTHER SERVICES	87,930	5,878	2,814	-72,691	23,931	503	26,969	51,403
990 IT CONTRACT SUPPORT SERVICES	81,834	0	2,455	-69,678	14,611	307	-926	13,992
991 FOREIGN CURRENCY VARIANCE	858	0	26	-884	0	0	0	0
0999 TOTAL OTHER PURCHASES	4,365,654	9,213	160,758	-41,072	4,494,553	159,275	47,897	4,701,725
9999 GRAND TOTAL	9,273,534	9,213	272,681	11,364	9,566,792	365,177	-25,026	9,906,943

Increase in OP32 Lines 923, 986, and 989 are attributed to Executive Order Minimum Wage Adjustment for Federal Contractors.

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I. Description of Operations Financed:

This Budget Activity Group provides for all medical and dental care plus pharmaceuticals received by Military Health System (MHS)-eligible beneficiaries using health care services provided in the private sector. This includes the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS), the TRICARE Managed Care Support Contracts (MCSC), the Uniformed Services Family Health Program (USFHP), the TRICARE Overseas Program (TOP), the Supplemental Care Programs, TRICARE Mail Order Pharmacy (TMOP), the National Retail Pharmacy, TRICARE Reserve Select (TRS), which is a premium-based program for reservists and their family members, and various support activities.

Pharmaceuticals - Purchased Health Care – Includes expenses for the pharmaceutical costs associated with contractual pharmacy services providing authorized benefits to eligible beneficiaries via the TRICARE Mail Order Pharmacy (TMOP). Excludes manpower authorizations and all administrative costs of the Defense Health Agency to include regional offices and Defense Supply Center-Philadelphia's management of the TMOP.

National Retail Pharmacy – Includes expenses for the pharmaceutical costs associated with contractual pharmacy services providing authorized benefits to eligible beneficiaries via the TRICARE Retail Pharmacy Program. The TRICARE Retail Pharmacy Program provides network pharmaceutical prescription benefits for eligible beneficiaries from private sector retail pharmacies.

TRICARE Managed Care Support Contracts (MCSC) – Includes expenses for the at-risk health care costs specifically for providing benefits identified in Title 32 United States Code of Federal Regulations 199 and measurable to the following for areas serviced by TRICARE Managed Care Support Contracts: health care authorized under the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS) for the following beneficiaries: (a) retired military personnel and (b) for spouses and dependent children of active duty, retired, or deceased military personnel in civilian facilities and by private practitioners. Also includes costs for the Extended Care Health Option (ECHO) for disabled dependents of active duty personnel covered under the Program for Persons with Disabilities (PPPWD) Act: Includes health care costs for those programs that are considered at-risk to the TRICARE Managed Care Support Contracts, and external and internal resource sharing agreements when paid by the TRICARE Managed Care Support contractors. In addition, it includes underwritten costs for health care for those beneficiaries who have enrolled directly with the MCSC-affiliated contracted providers.

Excluded from MCSC are PSC health care costs captured in separate PSC programs due to population or separate PSC contracts for these areas. Such as: (a) Beneficiaries enrolled to Military Treatment Facility (MTF) providers for health care are accounted for in MTF Enrollees - Purchased Care; (b) claims processed by the TRICARE Overseas Contract; (c) any not-at-risk/non-underwritten costs associated with the Supplemental Care Program and (d) Miscellaneous Purchased Care activities such as surveys, demonstrations, or pilots requested by Congress. Also excluded are Defense Health Agency (DHA) costs for manpower authorizations and any administrative costs of DHA executive agents associated with the management of TRICARE Managed Care Support Contracts.

Military Treatment Facility (MTF) Enrollees Purchased Care – Includes expenses for the underwritten costs for TRICARE health care benefits provided to the MTF Prime enrollees as authorized under the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS). Excludes health care provided under the Supplemental Care - Health Care program for active duty service members.

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I. Description of Operations Financed: (Cont.)

Dental Purchased Care – Includes expenses associated with the government-paid portion of insurance premiums specifically for providing dental benefits in civilian facilities and by private practitioners for the beneficiaries who are enrolled in the TRICARE Dental Program. Beneficiaries eligible for enrollment are: (a) active duty family members and (b) select reservist or individual ready reservist (IRR) and dependent family members. Also, includes administrative, management, and health care costs associated with these dental services. Excludes dental services and costs expensed for active duty members in the Supplemental Care - Dental program and direct health care system.

Uniformed Services Family Health Program (USFHP) – Includes costs based on annual capitation rates for providing TRICARE-like benefits authorized through contracts with designated civilian hospitals in selected markets to beneficiaries that enroll to a USFHP civilian facility located in their geographic residence. Beneficiaries eligible for enrollment into USFHP include active duty family members, retirees and their family members, and survivors who live within the specially designated geographic area.

Supplemental Care - Health Care – Includes costs for providing the TRICARE Prime benefit to active duty service members and other designated eligible patients who receive health care services in the civilian sector or non-defense facilities either referred or non-referred from the Military Treatment Facility (MTF), emergent care, and authorized non-emergent care. Includes members in travel status, Navy/Marine Corps service members enrolled to deployable units and referred by the unit primary care manager, eligible Reserve Component personnel, ROTC students, cadets/midshipmen, and eligible foreign military. This program also covers health care sought in the civilian sector due to active duty assignments in remote continental United States (CONUS) locations. The types of claims include health care under TRICARE Prime Remote, MTF-referred care, emergency care, and authorized non-emergency/non-referred care. Includes the costs of sharing agreements that are not paid by the managed care support contractors. Excludes all costs associated with dental care for active duty members expensed in Supplemental Care - Dental program.

Supplemental Care - Dental – Includes costs for a dental benefit for uniform dental care and administrative costs for active duty members, including eligible mobilized select reserves or individual ready reserves (IRR), receiving services in the civilian sector to include dental practitioners within Department of Veterans Affairs' facilities. This program also covers dental care for active duty members in the civilian sector due to military assignments in remote CONUS locations.

Continuing Health Education/Capitalization of Assets (CHE/CAP) – Provides for support of graduate medical education and capital investment within civilian facilities that provide services to the Military Health System and Medicare. These facilities operate under the Diagnosis Related Group (DRG) system of payment providing federal inpatient services under TRICARE and Medicare.

TRICARE Overseas Program (TOP) – Includes costs specifically for delivery of Military Health System Prime benefits in civilian facilities by private practitioners to active duty and eligible active duty family member beneficiaries enrolled to the TRICARE Overseas Program (TOP) and foreign claims for non-active duty beneficiaries, including Medicare-eligibles (when Medicare Part B is purchased). Coverage includes Europe, the Pacific region, Latin America, Asia, Africa, Canada, and covered through Remote Overseas areas or TRICARE Select options per the TOP contract. The scope of health care includes medical, dental, inpatient care, laboratory work, health care testing, and other health care services equivalent to the TRICARE program. Benefits are exclusively pass-through costs. Excluded from the benefits program is custodial care claims, special and emergent care claims, and Alaska claims. Also includes overseas health care

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I. Description of Operations Financed: (Cont.)

provided under the Supplemental Care program. Excludes demonstrations, congressional mandates, and other health care expensed in the Miscellaneous Purchased Health Care program.

Miscellaneous Purchased Health Care – Includes costs specifically for providing benefits identified in Title 32 of the Code of Federal Regulations Part 199 (32 CFR 199) authorized under the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS) for the following beneficiaries: (a) retired military personnel and (b) spouses and dependent children of active duty, retired, or deceased military personnel in civilian facilities and by private practitioners. Also includes costs for special education and institutional care in civilian facilities for disabled dependents of active duty personnel covered under the Program for Persons with Disabilities (PFPWD) Act. Includes administrative, management, and health care costs for Custodial Care, Special and Emergent Care claims, Alaska claims, Autism Benefit, Laboratory Developed Tests (LDTs), State Vaccine Program, TRICARE/Medicare dual eligible beneficiaries program (e.g., TRICARE Dual Eligible Fiscal Intermediary Contract (TDEFIC)), transition assistance programs, and TRICARE Reserve Select (TRS).

Miscellaneous Support Activities – Includes the miscellaneous administrative costs and support contract expenses for various programs, demonstrations, and other congressionally-mandated programs or actions not directly providing health care. Programs financed include: contracts for marketing and education functions, claims auditing, surveys, E-Commerce, case management services, the National Quality Monitoring Service, and on-going support from the Defense Enrollment Eligibility Reporting System (DEERS) are reflected in this program element.

II. Force Structure Summary:

TRICARE healthcare benefits under contracts in private sector care (PSC) programs are available to approximately 9.7 million DoD beneficiaries are eligible to receive TRICARE benefits. The Managed Care Support Contractors (MSCS) provide uniform health care plan options to eligible beneficiaries when they enroll with their regional contractor. TRICARE benefits include Dental Care via contracts with civilian dental practitioners as well. TRICARE benefits are available to approximately 2.5 million Medicare eligible beneficiaries of Military Retirees, Survivors or special eligibility groups who qualify and received benefits from Medicare program by law. These costs are paid from the Medicare Eligible Retiree Health Care Fund (MERHCF) and are excluded from the baseline budget for PSC contracts.

--FY 2022 Private Sector Care first quarter billed claims data shows an 11 percent increase over billed claims for the same period in 2021. Execution is being monitored and data analyzed to determine the root cause of increase.

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III. Financial Summary (\$ in Thousands):

	FY 2022						
	FY 2021	Budget	Congressional Action			Current	FY 2023
			Actuals	Request	Amount		
A. BA Subactivities							
1. Pharmaceuticals Purchased Health Care	\$958,433	\$924,136	\$0	0.00%	\$924,136	\$924,136	\$952,687
2. National Retail Pharmacy	\$1,125,866	\$1,167,994	\$0	0.00%	\$1,167,994	\$1,167,994	\$1,308,962
3. Managed Care Support Contracts	\$6,896,600	\$7,430,699	\$0	0.00%	\$7,430,699	\$7,430,699	\$7,453,535
4. MTF Enrollee Purchased Care	\$2,829,752	\$3,451,422	\$0	0.00%	\$3,451,422	\$3,451,422	\$3,547,846
5. Dental Purchased Care	\$293,313	\$338,242	\$-23,800	-7.04%	\$314,442	\$314,442	\$343,296
6. Uniformed Services Family Health Program	\$573,929	\$609,276	\$0	0.00%	\$609,276	\$609,276	\$635,869
7. Supplemental Care - Health Care	\$1,598,518	\$1,800,774	\$0	0.00%	\$1,800,774	\$1,800,774	\$1,865,603
8. Supplemental Care - Dental	\$119,825	\$109,812	\$0	0.00%	\$109,812	\$109,812	\$112,221
9. Continuing Health Education/Capitalization	\$380,167	\$470,703	\$-90,900	-19.31%	\$379,803	\$379,803	\$391,676
10. Overseas Purchased Health Care	\$378,314	\$386,917	\$0	0.00%	\$386,917	\$386,917	\$394,781
11. Miscellaneous Purchased Health Care	\$1,113,741	\$1,291,771	\$0	0.00%	\$1,291,771	\$1,291,771	\$1,337,863
12. Miscellaneous Support Activities	\$114,780	\$110,933	\$0	0.00%	\$110,933	\$110,933	\$110,870
Total	\$16,383,238	\$18,092,679	\$-114,700	-0.63%	\$17,977,979	\$17,977,979	\$18,455,209

1. FY 2021 actuals includes \$296,828K for Overseas Contingency Operations (OCO) costs.
2. FY 2021 actuals includes execution of \$332,100K Prior Approval Reprogramming action.
3. FY 2021 actuals excludes execution of DHP 1% Carryover Authority in the amount of \$313,217K.
4. FY 2021 actuals excludes Department of Defense (DoD) Medicare-Eligible Retiree Health Care Fund (MERHCF) receipts of \$8,461,000K (O&M only).
5. FY 2022 estimate includes \$188,223K for Direct War costs in the base request.
6. FY 2022 estimate excludes anticipated DoD MERHCF receipts of \$9,011,100K (O&M only).
7. FY 2023 includes \$7,108K for Overseas Operations Costs accounted for in the base request.
8. FY 2023 estimate excludes anticipated DoD MERHCF receipts of \$9,362,600K (O&M only).

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III. Financial Summary (\$ in Thousands): (Cont.)

<u>B. Reconciliation Summary</u>	<u>Change FY 2022/FY 2022</u>	<u>Change FY 2022/FY 2023</u>
BASELINE FUNDING	\$18,092,679	\$17,977,979
Congressional Adjustments (Distributed)	-114,700	
Congressional Adjustments (Undistributed)	0	
Adjustments to Meet Congressional Intent	0	
Congressional Adjustments (General Provisions)	0	
SUBTOTAL APPROPRIATED AMOUNT	17,977,979	
Fact-of-Life Changes (2022 to 2022 Only)	0	
SUBTOTAL BASELINE FUNDING	17,977,979	
Supplemental	0	
Reprogrammings	0	
Price Changes		717,547
Functional Transfers		0
Program Changes		-240,317
CURRENT ESTIMATE	17,977,979	18,455,209
Less: Supplemental	0	
NORMALIZED CURRENT ESTIMATE	\$17,977,979	\$18,455,209

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III. Financial Summary (\$ in Thousands): (Cont.)

FY 2022 President's Budget Request (Amended, if applicable)	\$18,092,679
1. Congressional Adjustments	\$-114,700
a) Distributed Adjustments.....	\$-114,700
1) a. Unjustified Cost Growth.....	\$-90,900
2) b. Unjustified Growth - Other Support Services	\$-23,800
b) Undistributed Adjustments.....	\$0
c) Adjustments to Meet Congressional Intent.....	\$0
d) General Provisions	\$0
FY 2022 Appropriated Amount	\$17,977,979
2. Supplemental Appropriations	\$0
a) Supplemental Funding.....	\$0
3. Fact-of-Life Changes.....	\$0
a) Functional Transfers.....	\$0
b) Technical Adjustments	\$0
c) Emergent Requirements.....	\$0

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III. Financial Summary (\$ in Thousands): (Cont.)

FY 2022 Baseline Funding	\$17,977,979
4. Reprogrammings (Requiring 1415 Actions)	\$0
a) Increases	\$0
b) Decreases	\$0
Revised FY 2022 Estimate	\$17,977,979
5. Less: Item 2, Supplemental Appropriation and Item 4, Reprogrammings	\$0
a) Less: Supplemental Funding	\$0
FY 2022 Normalized Current Estimate	\$17,977,979
6. Price Change	\$717,547
7. Functional Transfers	\$0
a) Transfers In	\$0
b) Transfers Out.....	\$0
8. Program Increases.....	\$85,834
a) Annualization of New FY 2022 Program	\$0
b) One-Time FY 2023 Increases	\$0
c) Program Growth in FY 2023	\$85,834

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III. Financial Summary (\$ in Thousands): (Cont.)

1) a. National Retail Pharmacy Increased Utilization:\$85,834
Adjustment to increase funding in the National Retail Pharmacy program element based on observed increase in utilization. The FY 2022 PSC Pharmaceutical Drugs base budget request is \$2,092,130K.

2) b. Overseas Operations Costs Accounted for in the Base:.....\$0
Non-Enduring Overseas Operations Costs accounted for in the base request for Private Sector Care (\$7,108K). Funding support requirements for combat support costs that discontinue once combat operations end at major contingency locations. This funding provides mobilized Reserve Component (RC) personnel and their family members with healthcare, pharmacy and dental benefits. These members are eligible for medical and dental similar to active duty personnel, including access to private sector care providers through the TRICARE Managed Care Support Contract (MCSC) provider networks. This access to MCSC provider networks also support those beneficiaries living in remote locations outside the established network areas. The TRICARE Reserve Select program offered to RC members who enroll and share premium with the government, is not included in this requirements. The FY 2022 Private Sector Care baseline funding request is \$18,092,679K.

9. Program Decreases\$-326,151

a) Annualization of FY 2022 Program Decreases\$0

b) One-Time FY 2022 Increases\$0

c) Program Decreases in FY 2023 \$-326,151

1) a. Reduced Requirements for COVID-19:..... \$-318,151
The FY 2023 reduction in COVID funding assumes that future outbreaks in COVID variants will be less extensive and less severe due to increased vaccination/natural immunity as we have seen with the Omicron variant, which had less hospitalization costs and more outpatient care. It also assumes that the national emergency will expire which will allow restoration of copays for COVID testing and telehealth. Furthermore, as the health care system is returning to normal, we expect most of the deferred care from the initial COVID outbreak to have been seen in FY 2022. The FY 2022 Private Sector Care baseline funding is \$17,977,979K.

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III. Financial Summary (\$ in Thousands): (Cont.)

2) b. Fraud and Abuse Prevention:..... \$-8,000

Continues implementation for reduction of resources for the FY 2022 Fraud and Abuse Prevention legislative proposal that amends Title 10 United States Code (USC), Section 1073e, to provide TRICARE the authority to levy civil monetary penalties associated with fraud and abuse claims against the Private Sector Care (PSC) charges and execute these funds in the Defense Health Program (DHP) appropriation. Previously, TRICARE relied upon the Department of Justice to prosecute these cases and any imposed criminal fines were distributed to the United States Treasury rather than the DHP. Proposal extends the current rule that all refunds and other amounts collected under TRICARE are credited to the DHP appropriation and are available for use in that program in the fiscal year in which the amount is collected. The FY 2022 Private Sector Care baseline funding request is \$17,977,979K.

FY 2023 Budget Request \$18,455,209

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IV. Performance Criteria and Evaluation Summary:

	<u>FY 2021 Actuals</u>	<u>FY 2022 Estimate</u>	<u>FY 2023 Estimate</u>	<u>FY 2021-2022 Change</u>	<u>FY 2022-2023 Change</u>
<u>Prime Enrollees - Managed Care Support Contract</u>					
TRICARE Region - East	954,137	954,238	947,030	101	-7,208
TRICARE Region - West	384,709	384,805	380,889	96	-3,916
Total MCS Contracts	1,338,846	1,339,043	1,327,919	197	-11,124
<u>TRICARE Select Enrollees</u>					
TRICARE Region - East	1,392,238	1,391,867	1,388,748	-371	-3,119
TRICARE Region - West	564,865	565,025	563,638	160	-1,387
Total Select	1,957,103	1,956,892	1,952,386	-211	-4,506
TRICARE Region - Overseas - Europe, Pacific, Latin America	508,865	509,598	504,772	733	-4,826
Total MCSC, Select and TRICARE Overseas	3,804,814	3,805,533	3,785,077	719	-20,456

Notes:

1. FY 2022 estimates are updated since the President's Budget submission. These figures are based on current data and trends analysis that was used in the forecasts for the FY 2023 estimates.
2. All data excludes TRICARE for Life beneficiaries paid by MERHCF and Tricare Dual Eligible Fiscal Intermediary Contract (TDEFIC).
3. Projection of Eligible Population (PEP) is the source for Civilian Prime, Select, and Overseas enrollment future year estimates. Source for MCSC enrollees is MHS Mart (M2), Defense Enrollment Eligibility Reporting System (DEERS).
4. Overseas enrollee counts include Prime, Prime Remote, and Select beneficiaries enrolled under Tricare Overseas Prime (TOP) contract.
5. Enrollment is exclusively to Private Sector Care Managed Care Support Contract providers.
6. FY 2022 enrollee estimates include Direct War projections as this funding is in the FY 2022 base.

**Defense Health Program
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IV. Performance Criteria and Evaluation Summary:

	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2021- 2022</u>	<u>FY 2022- 2023</u>
	<u>Actuals</u>	<u>Enacted</u>	<u>Request</u>	<u>Change</u>	<u>Change</u>
<u>Private Sector Care System Workload</u>					
Outpatient-Visits	74,656,872	80,242,298	79,580,125	5,585,426	-662,173
Outpatient-Weighted (Relative Value Units, RVUs)	145,886,012	156,800,419	155,506,476	10,914,407	-1,293,943
Inpatient-Admissions	294,681	316,727	314,114	22,046	-2,613
Inpatient-Weighted (Relative Weighted Products, RWPs)	283,867	305,104	302,587	21,237	-2,517
<u>Pharmacy</u>					
Retail - Number of Scripts (30-day equivalents)	22,282,735	24,162,446	24,933,305	1,879,711	770,859
Mail Order - Number of Scripts (30-day equivalents)	12,842,203	13,802,647	14,078,700	960,444	276,053
<u>TRICARE</u>					
Dental Program Enrollment	706,894	706,879	702,121	-15	-4,758
<u>Uniformed Services Family Health Plan</u>					
Enrollees (Non-Medicare eligible, DoD Only)	109,375	111,550	113,769	2,175	2,219

Workload Notes:

1. FY 2022 estimates are updated since the President's Budget submission. These figures are based on current data and trends analysis that was used in the forecasts for the FY 2023 estimates.
2. FY 2022 and FY 2023 USFHP enrollee and Dental Program estimates are based on the population trend.
3. FY 2022 workload estimate includes Direct War projections as this funding is in the FY 2022 base.
4. Data Source for Retail and Mail Order Number of Scripts (30-day equivalents) is the Pharmacy Data Transcription Service (PDTs) database.

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V. Personnel Summary:

	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Change FY 2021/ FY 2022</u>	<u>Change FY 2022/ FY 2023</u>
Active Military End Strength (E/S) (Total)	0	0	0	0	0
Reserve Drill Strength (E/S) (Total)	0	0	0	0	0
Reservists on Full Time Active Duty (E/S) (Total)	0	0	0	0	0
Civilian End Strength (Total)	0	0	0	0	0
Active Military Average Strength (A/S) (Total)	0	0	0	0	0
Reserve Drill Strength (A/S) (Total)	0	0	0	0	0
Reservists on Full Time Active Duty (A/S) (Total)	0	0	0	0	0
Civilian FTEs (Total)	0	0	0	0	0
Average Annual Civilian Salary (\$ in thousands)	0.0	0.0	0.0	0.0	0.0
Contractor FTEs (Total)	0	0	0	0	0

Personnel Summary Explanations:

Civilian, Contractor, and Military personnel are not programmed in the Private Sector Care Budget Activity Group.

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VI. OP 32 Line Items as Applicable (Dollars in thousands):

	FY 2021 <u>Program</u>	<u>Change from FY 2021 to FY 2022</u>		FY 2022 <u>Program</u>	<u>Change from FY 2022 to FY 2023</u>		FY 2023 <u>Program</u>
		<u>Price Growth</u>	<u>Program Growth</u>		<u>Price Growth</u>	<u>Program Growth</u>	
308 TRAVEL OF PERSONS	333	10	166	509	11	0	520
0399 TOTAL TRAVEL	333	10	166	509	11	0	520
647 DISA ENTERPRISE COMPUTING CENTERS	0	0	10,548	10,548	211	11	10,770
0699 TOTAL OTHER FUND PURCHASES	0	0	10,548	10,548	211	11	10,770
707 AMC TRAINING	6	0	-6	0	0	0	0
0799 TOTAL TRANSPORTATION	6	0	-6	0	0	0	0
901 FOREIGN NATIONAL INDIRECT HIRE (FNIH)	317	7	-324	0	0	0	0
920 SUPPLIES & MATERIALS (NON-FUND)	2	0	5	7	0		7
921 PRINTING & REPRODUCTION	5,085	153	557	5,795	122	0	5,917
924 PHARMACEUTICAL DRUGS	2,018,455	82,757	-9,082	2,092,130	83,685	85,834	2,261,649
925 EQUIPMENT PURCHASES (NON-FUND)	1	0	3,877	3,878	81		3,959
932 MGT PROF SUPPORT SVCS	36,814	1,104	-1,965	35,953	755	-148	36,560
933 STUDIES, ANALYSIS & EVAL	3,774	113	1,261	5,148	108	-75	5,181
955 OTHER COSTS (MEDICAL CARE)	6,967	286	-7,253	0	0	0	0
959 OTHER COSTS (INSURANCE CLAIMS/INDMNTIES)	0	0	3	3	0		3
986 MEDICAL CARE CONTRACTS	14,252,527	584,354	966,805	15,803,686	632,147	-324,724	16,111,109
987 OTHER INTRA-GOVT PURCH	7,884	237	9,347	17,468	367	-1,215	16,620
989 OTHER SERVICES	44,331	1,330	-42,807	2,854	60	0	2,914
990 IT CONTRACT SUPPORT SERVICES	6,742	202	-6,944	0	0	0	0
0999 TOTAL OTHER PURCHASES	16,382,899	670,543	913,480	17,966,922	717,325	-240,328	18,443,919
9999 GRAND TOTAL	16,383,238	670,553	924,188	17,977,979	717,547	-240,317	18,455,209

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**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2023 President's Budget
Consolidated Health Support OP-5 Exhibit**

I. Description of Operations Financed:

This Budget Activity Group encompasses nine functions supporting military medical readiness and delivery of patient care worldwide. The nine medical support functions include:

Examining Activities - Resources administering physical examinations and performing evaluations of medical suitability for military service. Includes resources required for Armed Forces Examination and Entrance Stations and the Department of Defense (DoD) Medical Examination Review Board.

Other Health Activities - Resources organizations and functions that support the provision of health care for DoD beneficiaries. Examples include: central medical laboratories, medical services squadrons, Army and Navy Medicine regional commands, public affairs, the Women, Infants and Children Program, humanitarian actions, family advocacy, patient affairs, and contribution of resources for the DoD beneficiaries' health care at the CAPT James A. Lovell Federal Health Care Center North Chicago, IL.

Military Public/Occupational Health - Resources military public health manpower, supplies, permits, certification and licensure fees, support equipment, and the associated requirements specifically identified for management, direction, and operation of disease prevention and control. Examples include: epidemiology, medical entomology, drinking water safety, monitoring hazardous waste disposal, food and facility sanitation, wellness/health promotion and education, community health nursing, medical intelligence, disease and climate illness, disease prevention and control, hearing conservation, and health and injury surveillance.

Veterinary Services - Resources the management, direction and operation of DoD's worldwide veterinary missions, as well as veterinary support requirements for other specified federal agencies. Includes veterinary care of government-owned animals, procedures involving animals in clinical investigation departments, and control of zoonotic and veterinary public health diseases.

Military Unique - Other Medical Activities - Resources unique military medical functions and activities that have a relationship to the size of the military population supported. Examples of programs include: physiological training units, drug abuse detection laboratories, optical repair and fabrication laboratories, medical logistics offices, medical materiel activities, deployment planning, plans, operation and training offices in military treatment facilities, and Department of Defense Armed Forces Blood Program.

Aeromedical Evacuation System - Resources the operation and administration of the Aeromedical Evacuation System, costs associated with intra- and inter-theater patient transportation, and operations to sustain the Aeromedical Evacuation Epidemiology Laboratory.

Service Support to Other Health Activities - Resources to support USTRANSCOM's Global Patient Movement Requirements Center.

Joint Pathology Center (JPC) - Resources manpower, equipment, and the associated operation and maintenance of the JPC including pathology education, consultation, and diagnostic testing provided to the Department of Defense and other Federal Agencies.

Federal Advisory Committee Act (FACA) Advisory Board Activities - Resources the FACA Advisory Board and subcommittee functions, meetings, support, studies and other activities. FACA is composed of those committees, boards, commissions, councils, task forces and similar groups which have been established

**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2023 President's Budget
Consolidated Health Support OP-5 Exhibit**

I. Description of Operations Financed: (Cont.)

to advise officers and agencies in the executive branch of the Federal Government and must follow the regulatory and statutory requirements related to FACA in Title 5 Appendix, United States Code (U.S.C.).

II. Force Structure Summary:

Consolidated Health Support includes staffing and contracts to support the Defense Health Agency, the Army Medical Command, Navy Bureau of Medicine and Surgery, and the Air Force Medical Services by providing the active duty and beneficiary population with complementary health care such as laboratory testing, immunizations, physical exams, humanitarian actions, epidemiology and entomology testing, disease prevention and control, veterinary services, physiological training, optical repair and fabrication, intra- and inter-theater patient transportation, and pathology education and consultation. In addition, this Budget Activity Group funds operations at the Army and Navy regional medical commands, the Armed Forces Blood Program, the medical logistics offices, deployment planning, and provides resources for USTRANSCOM's Global Patient Movement Requirements Center.

**Defense Health Program
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III. Financial Summary (\$ in Thousands):

	FY 2022						
	FY 2021	Budget	Congressional Action			Current	FY 2023
			Actuals	Request	Amount		
A. BA Subactivities							
1. Examining Activities	\$16,464	\$10,992	\$0	0.00%	\$10,992	\$10,992	\$9,183
2. Other Health Activities	\$352,931	\$417,122	\$-11,500	-2.76%	\$405,622	\$405,622	\$778,332
3. Military Public / Occupational Health	\$381,948	\$615,913	\$-29,225	-4.74%	\$586,688	\$586,688	\$556,555
4. Veterinary Services	\$2,788	\$3,723	\$0	0.00%	\$3,723	\$3,723	\$2,559
5. Military Unique-Other Medical Activities	\$493,007	\$460,106	\$14,000	3.04%	\$474,106	\$474,106	\$537,785
6. Aeromedical Evacuation System	\$3,656	\$2,470	\$0	0.00%	\$2,470	\$2,470	\$395
7. Service Support to Other Health Activities- TRANSCOM	\$0	\$479	\$0	0.00%	\$479	\$479	\$493
8. Joint Pathology Center	\$26,153	\$28,280	\$0	0.00%	\$28,280	\$28,280	\$29,041
9. Support to FACA Advisory Board Activities	<u>\$2,588</u>	<u>\$2,037</u>	<u>\$0</u>	<u>0.00%</u>	<u>\$2,037</u>	<u>\$2,037</u>	<u>\$2,023</u>
Total	\$1,279,535	\$1,541,122	\$-26,725	-1.73%	\$1,514,397	\$1,514,397	\$1,916,366

1. FY 2021 actuals includes \$1,517K for Overseas Contingency Operations (OCO) costs.
2. FY 2021 actuals includes \$22,000K reprogramming approved by Congress to fund critical COVID-19 requirements.
3. FY 2021 actuals includes \$92,459K reprogrammed to Consolidated Health Support for COVID-19 requirements.
4. FY 2021 actuals includes \$137,000K the Department of Defense transferred to Department of Veterans Affairs in FY 2021 for the Joint Department of Defense - Department of Veterans Affairs Medical Facility Demonstration Fund.
5. FY 2021 actuals includes \$15,000K the Department of Defense transferred to Department of Veterans Affairs in FY 2021 for the DoD-VA Health Care Joint Incentive Fund.
6. FY 2022 enacted includes \$525K for Direct War Costs accounted for in the base.
7. FY 2022 enacted includes \$137,000K the Department of Defense will transfer to the Department of Veterans Affairs in FY 2022 for the Joint Department of Defense - Department of Veterans Affairs Medical Facility Demonstration Fund.
8. FY 2022 enacted includes \$15,000K the Department of Defense will transfer to the Department of Veterans Affairs in FY 2022 for the DoD-VA Health Care Joint Incentive Fund.
9. FY 2023 estimate includes \$1,076K for Overseas Operations Costs accounted for in the base.
10. FY 2023 estimate includes \$168,000K the Department of Defense will transfer to the Department of Veterans Affairs in FY 2023 for the Joint Department of Defense - Department of Veterans Affairs Medical Facility Demonstration Fund.
11. FY 2023 estimate includes \$15,000K the Department of Defense will transfer to the Department of Veterans Affairs in FY 2023 for the DoD-VA Health Care Joint Incentive Fund.

**Defense Health Program
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III. Financial Summary (\$ in Thousands): (Cont.)

<u>B. Reconciliation Summary</u>	<u>Change</u>	<u>Change</u>
BASELINE FUNDING	<u>FY 2022/FY 2022</u>	<u>FY 2022/FY 2023</u>
	\$1,541,122	\$1,514,397
Congressional Adjustments (Distributed)	-26,725	
Congressional Adjustments (Undistributed)	0	
Adjustments to Meet Congressional Intent	0	
Congressional Adjustments (General Provisions)	0	
SUBTOTAL APPROPRIATED AMOUNT	1,514,397	
Fact-of-Life Changes (2022 to 2022 Only)	0	
SUBTOTAL BASELINE FUNDING	1,514,397	
Supplemental	0	
Reprogrammings	0	
Price Changes		53,971
Functional Transfers		161,790
Program Changes		186,208
CURRENT ESTIMATE	1,514,397	1,916,366
Less: Supplemental	0	
NORMALIZED CURRENT ESTIMATE	\$1,514,397	\$1,916,366

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III. Financial Summary (\$ in Thousands): (Cont.)

FY 2022 President's Budget Request (Amended, if applicable)	\$1,541,122
1. Congressional Adjustments	\$-26,725
a) Distributed Adjustments.....	\$-26,725
1) a. Therapeutic Service Dog Training:.....	\$14,000
2) b. Anomalous Health Incidents:.....	\$3,500
3) c. Unjustified Growth:	\$-21,900
4) d. Excess Growth Medical Care Contracts:	\$-22,325
b) Undistributed Adjustments.....	\$0
c) Adjustments to Meet Congressional Intent.....	\$0
d) General Provisions	\$0
FY 2022 Appropriated Amount	\$1,514,397
2. Supplemental Appropriations	\$0
a) Supplemental Funding.....	\$0
3. Fact-of-Life Changes.....	\$0
a) Functional Transfers.....	\$0

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III. Financial Summary (\$ in Thousands): (Cont.)

b) Technical Adjustments	\$0
c) Emergent Requirements	\$0
FY 2022 Baseline Funding	\$1,514,397
4. Reprogrammings (Requiring 1415 Actions)	\$0
a) Increases	\$0
b) Decreases	\$0
Revised FY 2022 Estimate	\$1,514,397
5. Less: Item 2, Supplemental Appropriation and Item 4, Reprogrammings	\$0
a) Less: Supplemental Funding	\$0
FY 2022 Normalized Current Estimate	\$1,514,397
6. Price Change	\$53,971
7. Functional Transfers	\$161,790
a) Transfers In	\$234,805

**Defense Health Program
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III. Financial Summary (\$ in Thousands): (Cont.)

1) a. Army Medical Research, Development, and Acquisition Capabilities transfer to the Defense Health Agency: \$154,309
 In accordance with Section 711 of the National Defense Authorization Act of FY 2019 and Section 737 of the National Defense Authorization Act of 2020, the Department of the Army transfers civilian pay funds, full-time equivalents (FTEs) and associated programmatic resources (+\$154,309K; +158 FTEs) to Defense Health Agency for the Army Medical Research, Development, and Acquisition Capabilities. This transfer provides resources for the Institute of Surgical Research (ISR), Research Institute of Chemical Defense (RICD), Medical Research Institute of Infectious Diseases (MRIID), Walther Reed Army Institute of Research (WRAIR), Medical Research Acquisition Activity (MRAA), and associated activities.

2) b. Consolidation of Public Health Services at the Defense Health Agency:\$77,632
 In accordance with Section 711 of the National Defense Authorization Act of FY 2019, the Department of the Army and the Department of the Air Force transfers FTEs, civilian pay and non-pay funding to the Defense Health Agency (DHA) to complete the Department of Defense Public Health consolidation at the DHA. The following Public Health resources are transferred to DHA from the Department of the Army: Army Public Health Center (+\$71,256K; +550 FTEs); and from the Department of the Air Force: Air Force Public Health (+\$6,376K; +53 FTEs).

3) c. Deployment Health Transfer to the Defense Health Agency:\$2,864
 Transfers Department of the Army Deployment Health Programs and associated funding to the Defense Health Agency Military Unique-Other Medical Activities (\$2,727K) and Other Health Activities (\$137K) program elements.

b) Transfers Out..... \$-73,015

1) a. Medical Readiness Transfer to the Department of the Army: \$-73,015
 In accordance with the FY 2021 Secretary of Defense Memo, Department of Defense Reform Focus in 2020, the Defense Health Program continues the transfer of the Army's Medical Readiness activities, which occur outside of the Military Treatment Facilities to the Department of the Army. The Defense Health Agency transfers (-\$73,015K and -562 FTES) to the Department of the Army for: Readiness Functions of the Army Medicine Regional Public Health Command (-\$31,823K; -246 FTEs); management and administration of the Office of Soldier Counsel, Troop Command, and Plans, Training, Mobilization and Security readiness programs (-\$23,184K; -155 FTEs); Army Medical Readiness (-\$14,558K; -139 FTEs); Womack Medical Center (-\$2,194K; -22 FTEs); Aeromedical Electronic Resource Office (-\$873K); and Army Reserve Command for Public Health Support (-\$383K).

8. Program Increases.....\$203,915

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III. Financial Summary (\$ in Thousands): (Cont.)

a) Annualization of New FY 2022 Program	\$0
b) One-Time FY 2023 Increases	\$0
c) Program Growth in FY 2023	\$203,915
1) a. Central Contracts Realigned to the Defense Health Agency:	\$137,199
<p>Realigns funding to Consolidated Health Support (+\$138,575K) from In-House for the execution of central contracts within the Defense Health Agency, following the realignment of the management and administration of the Military Treatment Facilities to the Defense Health Agency. Realignment funds central contracts for the following programs/services lines within the Military Treatment Facilities: Chiropractic Services, Hearing Conservation, Dental Services, Virtual Medical Library, Educational and Developmental Intervention Services (EDIS), Hyperbaric Medicine, Occupational Health, Optometry/Ophthalmology Services, Nuclear Support Programs (PRP), Public Health, Physical Therapy, and Aerospace (Flight) Medicine. The FY 2022 Consolidated Health Support baseline funding is \$1,514,397K. The FY 2022 Consolidated Health Support baseline contractor staffing is 2,783 CMEs.</p>	
2) b. CAPT James A. Lovell Federal Healthcare Center Reconciliation:	\$29,827
<p>Increase funding in the Other Health Activities program element to adequately fund the Joint Department of Defense - Department of Veterans Affairs Medical Facility Demonstration Fund (James A. Lovell Federal Health Care Center Great Lakes) established by section 1704 of Public Law 111-84 (FY 2010 National Defense Authorization Act). Reconciliation activities between Department of Defense and Department of Veterans Affairs reveal that additional funding is necessary to fund the Joint Department of Defense - Department of Veterans Affairs Medical Facility Demonstration fund at \$168,000K in FY 2023. The FY 2022 Joint Department of Defense - Department of Veterans Affairs Medical Facility Demonstration Fund baseline funding is \$137,000K.</p>	
3) c. Executive Order Minimum Wage Adjustment for Federal Contractors:	\$26,394
<p>Additional funding to address the estimated impacts of Executive Order (E.O.) 14026, Increasing the Minimum Wage for Federal Contractors, dated April 27, 2021. E.O. 14026, Section 4(a) requires the Department of Labor to implement regulations to increase the minimum wage to \$15 per hour by January 30, 2022, on contracts covered by the Fair Labor Standards Act, the Service Contract Act (SCA), or the Davis Bacon Act (DBA). The E.O. also applies only to Federal Contractors and Subcontractors on new contract actions entered into on or after January 30, 2022. In the Consolidated Health Support Budget Activity Group, the increase was applied to OP-32 lines 989. The FY 2022 Consolidated Health Support baseline funding is \$1,514,397K. The FY 2022 Consolidated Health Support baseline contractor staffing is 2,783 CMEs.</p>	

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III. Financial Summary (\$ in Thousands): (Cont.)

<p>4) d. Defense Health Regions, Markets and Stand-Alone Offices:</p> <p>Realigns funding and FTEs to Consolidated Health support (+\$8,352K; +57 FTEs), Other Health Activities from Management Activities to support the standup of the Defense Health Regions, Markets and Stand-Alone Offices (SSOs) supporting the respective healthcare missions. The FY 2022 Other Health Activities program element baseline funding is \$405,622K. The FY 2022 Other Health Activities program element baseline staffing is 940 FTEs.</p> <p>5) e. Anomalous Health Incidents:.....</p> <p>Funding supports the FY 2022 NDAA (P. L. 117-81, Sec 732, 10 U. S. C. 1071 note), Access by United States Government Employees and their Family Members to Certain Facilities of Department of Defense for Assessment and Treatment of Anomalous Health Conditions, which ensures that individuals affected by anomalous health incidents (as defined by the Secretary of Defense) receive timely and comprehensive health care and treatment. Funding increase medical care contracts in the Military Public/Occupational Health program element. The FY 2022 Consolidated Health Support baseline funding is \$1,514,397K. The FY 2022 Consolidated Health Support baseline contractor staffing is 2,783 CMEs.</p> <p>6) f. Independent Review Commission on Sexual Assault:</p> <p>Increase funding and FTEs (\$518K; 3FTEs) in the Military Unique-Other Medical Activities program element to support the Secretary of Defense's direction to implement the Independent Review Commission's (IRC) recommendations on sexual assault in the military. The FY 2022 Military Unique-Other Medical Activities program element baseline funding is \$474,106K. The FY 2022 Military Unique-Other Medical Activities baseline staffing is 671 FTEs.</p> <p>7) g. Overseas Operations Costs Accounted for in the Base:.....</p> <p>Overseas Operations Costs of \$1,076K is included in the FY 2023 Consolidated Health Support baseline request. Requirements in this budget activity group directly support the transportation of wounded warriors by aircraft from outside the theater of operations to the United States, the resupply of medical evacuation equipment, and ground transportation for patients outside of the theater. The FY 2022 Consolidated Health Support baseline funding is \$1,514,397K.</p>	<p>\$8,352</p> <p>\$1,625</p> <p>\$518</p> <p>\$0</p>
<p>9. Program Decreases</p> <p>a) Annualization of FY 2022 Program Decreases</p> <p>b) One-Time FY 2022 Increases</p>	<p>-\$17,707</p> <p>\$0</p> <p>\$0</p>

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III. Financial Summary (\$ in Thousands): (Cont.)

c) Program Decreases in FY 2023 \$-17,707

1) a. Reduced Requirements for COVID-19:..... \$-17,707

The FY 2023 reduction in COVID funding assumes that future outbreaks in COVID variants will be less extensive and less severe due to increased vaccination/natural immunity as we have seen with the Omicron variant. The FY 2022 Consolidated Health Support baseline funding is \$1,514,397K.

FY 2023 Budget Request \$1,916,366

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IV. Performance Criteria and Evaluation Summary:

	FY 2021 Enacted	FY 2022 Estimate	FY 2023 Estimate	Change FY 2021/2022	Change FY 2022/2023
1) Active Duty Force Structure	1,630,469	1,631,266	1,610,375	797	-20,891
2) Spectacles/Inserts Fabricated (000's)	1,420	1,562	1,610	142	42

1) Active Duty Force Structure: The FY 2021 to FY 2022 and FY 2022 to FY 2023 changes in Active Duty Force Structure support Department of Defense's Active Duty end strength increase from FY 2021 to FY 2022 and decrease in from FY22-FY23.

2) Spectacles/Inserts Fabricated: The FY 2021 to FY 2022 increase projects additional optical fabrication workload following limited access of readiness appointments from COVID-19 protocols in FY 2021. The FY 2022 to FY 2023 increase is due to a combination of multiple factors including, the G-EYE's, and optical access program that has been opened up across the DOD to give access to all military personal in conjunction with Joint Spectacle Prescription Entry Cloud-based Solution (JSPECS) that will increase our incoming workload volume. Historical data prior to COVID-19 was keeping us on a 3% increase in ophthalmic production. Anticipate a return to historical workload growth of 3% from FY 2022 to FY 2023.

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V. Personnel Summary:

	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Change FY 2021/ FY 2022</u>	<u>Change FY 2022/ FY 2023</u>
Active Military End Strength (E/S) (Total)	6,766	7,107	4,849	341	-2,258
Officer	1,841	2,045	1,310	204	-735
Enlisted	4,925	5,062	3,539	137	-1,523
Active Military Average Strength (A/S) (Total)	7,012	6,937	5,979	-75	-958
Officer	1,911	1,943	1,678	32	-265
Enlisted	5,101	4,994	4,301	-107	-693
Civilian FTEs (Total)	5,120	4,540	4,853	-580	313
U.S. Direct Hire	4,884	4,351	4,750	-533	399
Foreign National Direct Hire	94	102	51	8	-51
Total Direct Hire	4,978	4,453	4,801	-525	348
Foreign National Indirect Hire	141	86	51	-55	-35
Reimbursable Civilians	1	1	1	0	0
Average Annual Civilian Salary (\$ in thousands)	112.5	125.0	119.7	12.5	-5.3
Contractor FTEs (Total)	2,480	2,783	2,489	303	-294

Personnel Summary Explanations:

Explanation of changes in Active Military End Strength: The net increase from FY 2021 to FY 2022 (+341) reflects execution adjustments (+524: Air Force +380; Army +65; Navy +79) and includes the technical adjustment made by the military departments for the revised drawdown reductions (-183: Army: +23; Navy: +3; Air Force: -209) to comply with Section 719 of the FY 2020 National Defense Authorization Act (NDAA) that limits the realignment or reduction of military medical E/S authorizations and to reflect executable Service plans for the drawdown, and a technical adjustment to correct PBD 733B2 (Army: -3). The net decrease from FY 2022 to FY 2023 (-2,258) reflects the following changes by Component: Army (-1,785): Transfer of the following programs to the Department of the Army: 1) Defense Wide Review Army Readiness (-1,419); 2) Public Health Command and Regional Dental Command (-138); 3) In-MTF Army Readiness Programs (-127); 4) Army Medical Headquarters (-4); as well as revised military end strength drawdown reductions (-68); internal realignments for the Executive Agent Shared Services Reconciliation (-27) and the Armed Forces Pest Management Board (-3); a technical correction to align Agency controls with Service controls in the CAPE system that accounts for manpower (-2); and an internal Army Technical correction (+3).

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V. Personnel Summary: (Cont.)

Explanation of changes in Civilian FTEs: The net decrease from FY 2021 to FY 2022 (-580) reflects FY 2021 execution adjustments (-584: Air Force +53; Army +43; DHA-Comptroller -73; DCFM -237; Navy -370) based on FY 2021 actual FTE execution, as well as internal realignment at DHA-Comptroller (+4). The net increase from FY 2022 to FY 2023 (+313) reflects the following changes by component: Defense Health Agency (+797): Consolidation of the Public Health Services at the Defense Health Agency (+601), transfer of the Army Medical Research, Development and Acquisition Capabilities (+158), Independent review Commission on Sexual Assault (+3), Stand up of the Stand Alone Offices (SSO) and Defense Health Regions (+57); and the Defense Wide Review correction Womack Phase 1 (-22). Army (-348): Transfer of the following programs to the Department of the Army: 1) Readiness Functions of the Army Medicine Regional Public Health Command (-246); 2) In-Medical Treatment Facility Readiness Programs (-155); 3) Army Medical Readiness (-139); 4) FTE only transfer for Family Advocacy Program (-1); as well as internal realignments to other BAGs (-193). Air Force (-92): Internal realignment to other BAGs (-91) and action to reverse a Foreign National Indirect Hire (-1). Navy: Internal realignment from other BAGs (-44).

Explanation of changes in Contractor FTEs: The increase from FY 2021 to FY 2022 (+303) is accounted for in the Other Health Activities (+248), Military Public/Occupational Health program element (+86), Examining Activities program element (-1), and Military Unique-Other Medical program elements (-30) attributed to actual execution within the Consolidated Health Support programs and the net impact of the transfer of contract resources from the Services to the Defense Health Agency (DHA). The decrease from FY 2022 to FY 2023 (-294) is accounted for in the Other Health Activities (-202), Military Unique-Other Medical (-44), Military Public/Occupational Health (-42), Examining Activities (-5), and SPT to FACA Advisory Board Activities program elements (-1) and are attributed to reductions due to contract consolidation efforts and the transfer of readiness programs to the Military Departments.

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VI. OP 32 Line Items as Applicable (Dollars in thousands):

	FY 2021 <u>Program</u>	<u>Change from FY 2021 to FY 2022</u>		FY 2022 <u>Program</u>	<u>Change from FY 2022 to FY 2023</u>		FY 2023 <u>Program</u>
		<u>Price Growth</u>	<u>Program Growth</u>		<u>Price Growth</u>	<u>Program Growth</u>	
101 EXEC, GEN'L & SPEC SCHEDS	562,278	12,764	-27,957	547,085	22,567	2,007	571,659
103 WAGE BOARD	5,681	129	2,504	8,314	343	-7,300	1,357
104 FN DIRECT HIRE (FNDH)	4,704	107	-348	4,463	184	223	4,870
105 SEPARATION LIABILITY (FNDH)	97	2	132	231	10	-241	0
106 BENEFIT TO FMR EMPLOYEES	0	0	0	0	0	72	72
107 VOLUNTARY SEP INCENTIVES	177	4	255	436	18	-215	239
0199 TOTAL CIVILIAN PERSONNEL COMPENSATION	572,937	13,006	-25,414	560,529	23,122	-5,454	578,197
308 TRAVEL OF PERSONS	3,422	103	10,377	13,902	292	963	15,157
0399 TOTAL TRAVEL	3,422	103	10,377	13,902	292	963	15,157
401 DLA ENERGY (FUEL PRODUCTS)	11	1	-6	6		0	6
402 SERVICE FUND FUEL	0	0	3	3	0	0	3
412 NAVY MANAGED SUPPLY, MATL	0	0	155	155	9	-5	159
414 AIR FORCE CONSOL SUST AG (SUPPLY)	0	0	57	57	3	-2	58
416 GSA SUPPLIES & MATERIALS	0	0	476	476	10	-1	485
417 LOCAL PURCH SUPPLIES & MAT	0	0	2,912	2,912	61	2	2,975
422 DLA MAT SUPPLY CHAIN (MEDICAL)	532	1	1,697	2,230	15	32	2,277
0499 TOTAL DEFENSE WORKING CAPITAL FUND SUPPLIES AND MATERIALS	543	2	5,294	5,839	98	26	5,963
503 NAVY FUND EQUIPMENT	0	0	26	26	0	1	27
506 DLA MAT SUPPLY CHAIN (CONST & EQUIP)	0	0	156	156	1	3	160
0599 TOTAL DEFENSE WORKING CAPITAL FUND EQUIPMENT PURCHASES	0	0	182	182	1	4	187
633 DLA DOCUMENT SERVICES	0	0	57	57	5	-4	58
671 DISA DISN SUBSCRIPTION SERVICES (DSS)	0	0	12	12	0		12
675 DLA DISPOSITION SERVICES	0	0	6	6	2	-1	7
679 COST REIMBURSABLE PURCHASE	0	0	3	3	0	0	3

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VI. OP 32 Line Items as Applicable (Dollars in thousands):

	FY 2021 Program	Change from FY 2021 to FY 2022		FY 2022 Program	Change from FY 2022 to FY 2023		FY 2023 Program
		Price Growth	Program Growth		Price Growth	Program Growth	
680 BUILDING MAINT FUND PURCH	0	0	371	371	5	2	378
0699 TOTAL OTHER FUND PURCHASES	0	0	449	449	12	-3	458
702 AMC SAAM (FUND)	0	0	1	1	0	-1	0
707 AMC TRAINING	446	3	-449	0	0	0	0
719 SDDC CARGO OPS-PORT HNDLG	0	0	142	142	-16	19	145
771 COMMERCIAL TRANSPORT	180	5	1,342	1,527	0	31	1,558
0799 TOTAL TRANSPORTATION	626	8	1,036	1,670	-16	49	1,703
901 FOREIGN NATIONAL INDIRECT HIRE (FNIH)	2,752	62	3,990	6,804	143	-4,353	2,594
912 RENTAL PAYMENTS TO GSA (SLUC)	0	0	5	5	0		5
913 PURCHASED UTILITIES (NON-FUND)	210	6	-216	0	0	0	0
914 PURCHASED COMMUNICATIONS (NON-FUND)	650	20	440	1,109	23	1	1,133
915 RENTS (NON-GSA)	147	4	2,276	2,427	51	-3	2,475
917 POSTAL SERVICES (U.S.P.S)	6	0		6	0		6
920 SUPPLIES & MATERIALS (NON-FUND)	50,894	1,527	19,156	71,577	1,503	1,524	74,604
921 PRINTING & REPRODUCTION	365	11	1,203	1,579	33	-8	1,604
922 EQUIPMENT MAINTENANCE BY CONTRACT	3,621	109	-691	3,039	64	-671	2,432
923 FACILITIES SUST, REST, & MOD BY CONTRACT	501	15	1,509	2,025	43	585	2,653
924 PHARMACEUTICAL DRUGS	57,185	2,345	285	59,815	2,393	-60	62,148
925 EQUIPMENT PURCHASES (NON-FUND)	5,003	150	18,249	23,402	491	18,145	42,038
926 OTHER OVERSEAS PURCHASES	0	0	38	38	1	0	39
930 OTHER DEPOT MAINTENANCE (NON-FUND)	0	0	443	443	9		452
932 MGT PROF SUPPORT SVCS	180,543	5,416	-87,261	98,698	2,073	-2,866	97,905
933 STUDIES, ANALYSIS & EVAL	5,474	164	652	6,290	132	-194	6,228
934 ENGINEERING & TECH SVCS	3,965	119	-4,084	0	0	0	0
935 TRAINING AND LEADERSHIP DEVELOPMENT	0	0	26	26	1	0	27
937 LOCALLY PURCHASED FUEL (NON-FUND)	39	1	132	172	-13	17	176
955 OTHER COSTS (MEDICAL CARE)	101,831	4,175	-66,943	39,063	1,563	266,698	307,324

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VI. OP 32 Line Items as Applicable (Dollars in thousands):

	FY 2021 Program	Change from FY 2021 to FY 2022		FY 2022 Program	Change from FY 2022 to FY 2023		FY 2023 Program
		Price Growth	Program Growth		Price Growth	Program Growth	
959 OTHER COSTS (INSURANCE CLAIMS/INDMNTIES)	20	0	-20	0	0	0	0
960 OTHER COSTS (INTEREST AND DIVIDENDS)	8,798	0	-7,410	1,388	29	862	2,279
964 OTHER COSTS (SUBSISTENCE AND SUPPORT OF PERSONS)	457	14	-46	425	9	-1	433
986 MEDICAL CARE CONTRACTS	47,652	1,954	425,608	475,214	19,009	36,868	531,091
987 OTHER INTRA-GOVT PURCH	56,335	1,690	8,523	66,548	1,398	308	68,254
988 GRANTS	15,650	470	-2,074	14,046	295	-14,294	47
989 OTHER SERVICES	130,344	3,910	-85,643	48,611	1,021	50,281	99,913
990 IT CONTRACT SUPPORT SERVICES	29,565	887	-21,376	9,076	191	-426	8,841
0999 TOTAL OTHER PURCHASES	702,007	23,049	206,772	931,826	30,462	352,413	1,314,701
9999 GRAND TOTAL	1,279,535	36,168	198,696	1,514,397	53,971	347,998	1,916,366

1. In FY 2021, the Department of Defense transferred O&M funding of \$137,000K, OP32 line 986 to the Joint Department of Defense - Department of Veterans Affairs Medical Facility Demonstration Fund for execution at the James A. Lovell Federal Health Care Center Great Lakes.
2. FY 2023 increase in OP32 line 955 is attributed to the following:
 - a. The Army Medical Research, Development, and Acquisition Capabilities transferred to DHA: +\$122,590K
 - b. Central Contracts Realigned to the Defense Health Agency: +\$95,087K
 - c. Deployment Health realigned to the Defense Health Agency: +49,021K
3. FY 2023 increase in OP32 line 989 is attributed to the following:
 - a. Federal Contractor Minimum Wage: +\$26,394K.
 - b. Central Contracts Realigned to the Defense Health Agency: +\$23,887K
4. FY 2023 increase in OP32 line 925 is attributed to equipment refresh purchase through contracts that were realigned to the Defense Health Agency: +\$18,145K.

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I. Description of Operations Financed:

Service Medical Information Management/Information Technology (IM/IT) – Provides resources for Military Treatment Facility IM/IT activities, infrastructure, Service Medical specific systems; and Functional Area Applications (Service-Unique); Communications and Computing Infrastructure to include Information Assurance (IA), long haul/wide area and deployable tactical/shipboard communications, office automation and video-teleconferencing; and related technical activities including information architecture, data standardization and data interoperability. Specifically excludes Base Communications and Voice Communications requirements which are funded in the Base Operations / Communications Budget Activity Group.

Military Health System (MHS) Information Management/Information Technology IM/IT Support Programs – Provides resources for services that are either contracted or provided by other Department of Defense (DoD) agencies. Provides for modifications to contractor owned IM/IT systems to meet congressional and other mandated changes; changes or modifications to other DoD agencies' IM/IT systems to comply with changes in medical regulatory guidance; commercially purchased IM/IT related services to support the Managed Care Support Contracts' compliance requirements; and funding to support centrally managed office automation, video-teleconferencing and related technical activities including information architecture, data standardization and data interoperability. Specifically excludes funding for centrally managed or Service Medical IM/IT systems including acquisition of centrally developed systems.

Military Health System (MHS) Tri-Service Information Management/Information Technology (IM/IT) – Provides resources for the Military Health System (MHS) centrally managed, Tri-Service IM/IT programs to include development of standardized information systems designed to meet Tri-Service functional requirements at all echelons of command in the medical functional area. The Tri-Service IM/IT program defines, acquires/develops, maintains and oversees the design, enhancement, operation, acquisition, sustainment and management of information systems, related IT infrastructure and communications in support of MHS activities.

Information Technology Development – Integrated Electronic Health Record – Provides resources for the acquisition, maintenance, enhancement, operation, sustainment, and program management in support of the Integrated Electronic Health Record (iEHR) information program and associated capabilities for the CAPT James A. Lovell Federal Health Care Center, North Chicago, IL and the Interagency Program Office (IPO).

Department of Defense (DoD) Healthcare Management System Modernization Program (DHMSM) – Provides resources for the deployment and related technical sustainment of Information Technology (IT) software and hardware baseline in support of healthcare delivery and the DoD Healthcare Management System Modernization (DHMSM) Major Automated Information System within the Military Health System (MHS). This includes funding for IT equipment and recurring replacement, production software licenses and renewal/version upgrades, system deployment/implementation activities and initial system user training. This program also includes funding to support the program office operations (e.g., Government and Vendor) and commercial software maintenance, hardware maintenance, system administration, other operations costs, recurring training and education, and recurring telecommunications and data/system hosting and storage requirements in support of the DHMSM IT requirements. This program is established in accordance with the joint memo from USD(C) and

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I. Description of Operations Financed: (Cont.)

USD(AT&L) titled "Joint Memorandum on Major Defense Acquisition Program and Major Automated Information System Program Resource Transparency in Department of Defense Budget Systems" dated June 27, 2013.

DoD Medical Information Exchange (DMIX) – Provides resources for the Military Health System's procurement and sustainment of Information Technology software, hardware, interfaces, infrastructure and other related IT activities in support of healthcare interoperability and medical information exchange programs. The Defense Medical Information Exchange (DMIX) Program includes funding for any IT capability initiative supporting the seamless exchange of standardized health data among Department of Defense, Department of Veterans Affairs, other federal agencies, private sector healthcare providers, and benefits administrators. Activities under this program element provide the capability for healthcare providers to access and view comprehensive and current patient health records from a variety of data sources which enable healthcare providers to responsively make more informed patient care decisions. This program element also includes funding to support program office operations (e.g., Government and Vendor), system administration, other operations costs, recurring training and education, and recurring telecommunications and data/system hosting and storage capability in support of requirements.

Theater Medical Information Program - Joint (TMIP - J) – Provides resources to integrate components of the Military Health System (MHS) sustaining base systems and the Services' medical information systems to ensure continuous interoperable medical support for mobilization, deployment and sustainment of all Theater and deployed forces in support of any mission. TMIP-J enhances the clinical care and information capture at all levels of care in operational environments, transmits critical information to combatant commanders, supports the evacuation chain for combat and non-combat casualties, and forges the theater links of the longitudinal health record to the sustaining base and the Department of Veterans Affairs. TMIP-J is the medical component of the Global Combat Support System. TMIP-J provides information at the point of care and to the operational, tactical and strategic decision makers through efficient, reliable data capture, and data transmission to a centralized operational database. This delivers TMIP-J's four pillars of information support through the electronic health record, (1) integrated medical logistics, (2) patient movement and tracking, (3) medical command and control through data aggregation and reporting; and (4) analysis tools for trend analysis and situational awareness. TMIP-J fulfills the premise of "Train as you fight" through the integration of components which are identical or analogous to systems from the sustaining base. TMIP-J adapts and integrates these systems to specific operational requirements and assures their availability in reduced communications settings of the deployed environment through store and forward capture and transmission technology. TMIP-J supports sustainment for service and other modules to include but are not limited to: AHLTA-Theater, Mobile Computing Capability, Maritime Medical Modules, Medical Situational Awareness Theater (MSAT), TMIP Composite Health Care System Cache, Theater Medical Data Store, Medical Logistics and Special Projects. The purpose of this program element is to capture the continuing sustainment activities of TMIP-J products until replaced by the initial implementation of the modernized electronic health record solution acquired by the Defense Healthcare Management Systems Modernization Program and other follow-on Joint Operational Medicine Information Systems products that replace current capabilities. Program ends in FY 2021.

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I. Description of Operations Financed: (Cont.)

Joint Operational Medicine Information System (JOMIS) – Provides resources for the procurement, deployment and sustainment of the Joint Operational Medicine Information Systems (JOMIS) capabilities for DoD operational medicine locations. Funding will provide: procurement support for integrating medical capabilities under a joint concept of operations; support field medical operations with regard to oversight and evaluation of critical command, control, communications, computer and intelligence (C4I) health decision support systems; support for integrating medical capabilities under a joint concept of operations; sustainment support to JOMIS software baselines, comprised of the Military Health System GENESIS electronic health record (EHR) capability and legacy operational medicine modules not replaced by the new EHR capabilities; and support for the upgrading or replacement of legacy operational medicine modules. The delivered products will support all echelons of care through an aggregation of medical data and situational reports that serves the theater of operations as well as the Continental United States sustaining base medical missions. It establishes the means and a standard for tying existing, developing, and future medical information systems (software and equipment) into an interoperable system that supports Military Departments. Funding will provide integrated, automated medical information addressing the functional areas, command and control (including planning functions), medical logistics, patient regulation and evacuation, medical threat/intelligence, health care delivery, manpower/training, and medical capabilities assessment and sustainment analysis.

Cybersecurity – Provides resources for the design, build, fielding, development, refresh and sustainment of information technology (IT) supporting: the DoD's ability to maintain an appropriate level of confidentiality, integrity, authentication, non-repudiation and availability; the information and information assets; the documentation of threats and vulnerabilities; the trustworthiness of users and interconnecting systems; and the minimization of the impact of impairment or destruction to the DoD information system(s). The Military Health System cybersecurity is a form of defensive cybersecurity designed for the protection of information against unauthorized interception, modification, fabrication, and interruption of data in transit and at rest. Resources will encompass boundary protection and intrusion detection systems; assessment and authorization; developing and maintaining information assurance (IA) policy and governance; network continuity; continuous monitoring; training; Public Key Encryption (PKE) and Public Key Infrastructure (PKI) implementation; and computer network defense. Includes DHA Risk Management Framework that provides a process that integrates security and risk management activities into the system development life cycle. The risk-based approach to security control selection and specification considers effectiveness, efficiency, and constraints due to applicable laws, directives, Executive Orders, policies, standards, or regulations. These activities related to managing organizational risk are paramount to an effective information security program and can be applied to both new and legacy systems within the context of the system development life cycle and the Federal Enterprise Architecture. This program element will not be used to capture resources for investments that are embedded in another system or for IT security management, as described by DoD CIO as unclassified, non-weapon system resources needed for Certification & Accreditation, Public Key Infrastructure, virus protection, malware, and/or firewalls.

Military Health System (MHS) Desktop to Datacenter (D2D) – Provides resources for the design, build, testing, installation, fielding, upgrades and sustainment of information technology (IT) supporting the DoD's ability to provide and maintain infrastructure and enterprise support services for Military Health System (MHS) centrally managed IT systems in all managed health care regions worldwide. Resources will encompass: Circuits, Network Service Operations Center, MHS Enterprise Service Operations Centers (MESOC) Regional Services, Video Network Center, Lifecycle Management (Asset Management Support

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I. Description of Operations Financed: (Cont.)

Services and Enterprise Software Management), Performance Planning Management, and Boundary Services and Server Sustainment. This includes the following: (1) Network Security Management Service (NSMS): Seamless integrated Wide, Local and Wireless Network allowing health care providers/staff to move from hospital to hospital and authenticate to all IT services without the need of separate accounts; (2) Desktop as a Service (DaaS): Desktop design standardization across the application, desktop and server environments allowing providers/staff ability to move from one exam room to another within the medical facility and have access to information; (3) Compute and Storage Management (CSMS): Centrally managed integrated, robust computing infrastructure that provides a standard method to host applications and the ability to use single applications to support health care encounters; (4) Directory Services Enterprise Management (DSEM): Centralized, secure access and authentication capability to network resources that allows providers and staff to all IT services without the need of multiple accounts; (5) Global Service Center (GSC): Consolidated MHS enterprise IT Service Desk allowing for a single point of contact for all customers regardless of physical location.

II. Force Structure Summary:

This program funds concept exploration, management and sustainment of automated information systems, communications and computing infrastructure, related technical activities and information assurance supporting military medical readiness and promoting quality healthcare services to members of the Armed Forces, their families, and others entitled to DoD healthcare.

Workload Introduction:

The Information Management/Information Technology (IM/IT) workload data presented in the Performance Criteria and Evaluation Summary section is designed to give greater insight and a clearer depiction of the Defense Health Agency's IM/IT work for: (1) Military Treatment Facility IT Support; (2) MHS Enterprise Cyber Security Support; (3) Defense Health Agency Global Service Center; (4) Desktop to Datacenter and Medical Community of Interest (Med-COI) Deployments; (5) DoD Healthcare Management Systems Modernization (DHMSM) planned deployment schedule (6) DOD Medical Information Exchange and Interoperability (DMIX); (7) Enterprise Intelligence and Data Solutions (EIDS) MHS Information Platform (MIP); (8) Joint Operational Medicine Information System (JOMIS) – (former Theater Medical Information Program – Joint programs); (9) Joint Operational Medicine Information System (JOMIS)/ Medical Common Operating Picture (MedCOP).

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III. Financial Summary (\$ in Thousands):

	FY 2022						
	FY 2021	Budget	Congressional Action			Current	FY 2023
			Actuals	Request	Amount		
A. BA Subactivities							
1. Service Medical IM/IT	\$240,104	\$128,073	\$0	0.00%	\$128,073	\$128,073	\$205,994
2. DHP IM/IT Support Programs	\$33,906	\$36,236	\$0	0.00%	\$36,236	\$36,236	\$37,004
3. Tri-Service IM/IT	\$910,149	\$867,442	\$0	0.00%	\$867,442	\$867,442	\$664,214
4. Integrated Electronic Health Record (iEHR)	\$3,033	\$10,429	\$0	0.00%	\$10,429	\$10,429	\$22,049
5. DoD Healthcare Management System Modernization (DHMSM)	\$412,520	\$529,063	\$-2,528	-0.48%	\$526,535	\$526,535	\$562,623
6. DoD Medical Information Exchange and Interoperability (DMIX)	\$52,080	\$113,925	\$0	0.00%	\$113,925	\$113,925	\$4,412
7. Theater Medical Information Program - Joint (TMIP-J)	\$83,838	\$0	\$0	0.00%	\$0	\$0	\$0
8. Joint Operational Medicine Information System (JOMIS)	\$24,190	\$118,658	\$0	0.00%	\$118,658	\$118,658	\$170,766
9. Cybersecurity	\$134,341	\$140,663	\$0	0.00%	\$140,663	\$140,663	\$148,726
10. Military Health System Desktop to Datacenter (D2D)	<u>\$331,110</u>	<u>\$289,188</u>	<u>\$0</u>	<u>0.00%</u>	<u>\$289,188</u>	<u>\$289,188</u>	<u>\$435,363</u>
Total	\$2,225,271	\$2,233,677	\$-2,528	-0.11%	\$2,231,149	\$2,231,149	\$2,251,151

1. FY 2021 actuals includes Department of Defense (DoD) Medical Eligible Retiree Health Care Fund (MERHCF) of \$1,000K (O&M only).
2. FY 2021 actuals includes +\$78,000K reprogramming approved by Congress to fund Desktop to Datacenter (D2D)/Medical Community of Interest (Med-COI) related delays due to the COVID-19 pandemic.
3. FY 2021 actuals includes +\$61,947K reprogrammed to Information Management/Information Technology for COVID-19 unfunded IM/IT requirements.
4. FY 2022 enacted excludes DoD MERHCF of \$1,000K (O&M only).
5. FY 2023 estimate excludes DoD MERHCF of \$1,100K (O&M only).
6. The FY 2023 estimate includes the following Information Management/Information Technology (IM/IT) Budget Activity Group internal program element realignment:
 - (a) Tri-Service IM/IT program element (-\$214,323K) to Service Medical IM/IT program element (+75,154K) and Desktop to Datacenter program element (+\$139,169K) for infrastructure activities.

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III. Financial Summary (\$ in Thousands): (Cont.)

<u>B. Reconciliation Summary</u>	<u>Change FY 2022/FY 2022</u>	<u>Change FY 2022/FY 2023</u>
BASELINE FUNDING	\$2,233,677	\$2,231,149
Congressional Adjustments (Distributed)	-2,528	
Congressional Adjustments (Undistributed)	0	
Adjustments to Meet Congressional Intent	0	
Congressional Adjustments (General Provisions)	0	
SUBTOTAL APPROPRIATED AMOUNT	2,231,149	
Fact-of-Life Changes (2022 to 2022 Only)	0	
SUBTOTAL BASELINE FUNDING	2,231,149	
Supplemental	0	
Reprogrammings	0	
Price Changes		51,838
Functional Transfers		22,412
Program Changes		-54,248
CURRENT ESTIMATE	2,231,149	2,251,151
Less: Supplemental	0	
NORMALIZED CURRENT ESTIMATE	\$2,231,149	\$2,251,151

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III. Financial Summary (\$ in Thousands): (Cont.)

FY 2022 President's Budget Request (Amended, if applicable)	\$2,233,677
1. Congressional Adjustments	\$-2,528
a) Distributed Adjustments.....	\$-2,528
1) a. Excess Growth DoD Healthcare Management System Modernization:.....	\$-2,528
b) Undistributed Adjustments.....	\$0
c) Adjustments to Meet Congressional Intent.....	\$0
d) General Provisions	\$0
FY 2022 Appropriated Amount	\$2,231,149
2. Supplemental Appropriations	\$0
a) Supplemental Funding.....	\$0
3. Fact-of-Life Changes.....	\$0
a) Functional Transfers.....	\$0
b) Technical Adjustments	\$0
c) Emergent Requirements.....	\$0
FY 2022 Baseline Funding	\$2,231,149

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III. Financial Summary (\$ in Thousands): (Cont.)

4. Reprogrammings (Requiring 1415 Actions)	\$0
a) Increases	\$0
b) Decreases	\$0
Revised FY 2022 Estimate	\$2,231,149
5. Less: Item 2, Supplemental Appropriation and Item 4, Reprogrammings	\$0
a) Less: Supplemental Funding	\$0
FY 2022 Normalized Current Estimate	\$2,231,149
6. Price Change	\$51,838
7. Functional Transfers	\$22,412
a) Transfers In	\$25,548
1) Army Medical Research, Development and Acquisition Capabilities:	\$25,548

In accordance with Section 711 of the National Defense Authorization Act of FY 2019 and section 737 of the National Defense Authorization Act of 2020, the Department of the Army transfers civilian pay funds, full-time equivalents (FTEs) and associated programmatic resources (+\$25,548K; +294 FTEs) to Defense Health Agency for Information Management/Information Technology (IM/IT) associated with the Army Medical Research, Development, and Acquisition Capabilities. This transfer provides resources for IT contract support services to the Institute of Surgical Research (ISR), Research Institute of Chemical Defense (RICD), Medical Research Institute of Infectious Diseases (MRIID), Walter Reed Army Institute of Research (WRAIR), Medical Research Acquisition Activity (MRAA), and associated activities.

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III. Financial Summary (\$ in Thousands): (Cont.)

b) Transfers Out..... \$-3,136

1) IM/IT Medical Readiness - Transfer to the Department of the Army:..... \$-3,136

In accordance with the FY 2021 Secretary of Defense Memo, Department of Defense Reform Focus in 2020, the Defense Health Program transfers the Service's Medical Readiness activities which occur outside of the Military Treatment Facilities to the Department of the Army. The Defense Health Agency transfers (-\$3,136K and 24 FTEs) to the Department of the Army for: IM/IT for Readiness Functions for U.S. Army Training and Doctrine Command (TRADOC), U.S. Army Materiel Command (AMC), and the U.S. Army Health Facility Planning Agency (HFPA) (-\$2,723K; -21 FTEs) and IM/IT for Readiness Functions of the Army Public Health Commands (PHC) and Regional Dental Commands (RDC) (-\$413K; -3 FTEs).

8. Program Increases..... \$123,569

a) Annualization of New FY 2022 Program \$0

b) One-Time FY 2023 Increases \$0

c) Program Growth in FY 2023..... \$123,569

1) a. Joint Operational Medicine Information Systems:..... \$49,397

Provides funds for the following Joint Operational Medicine Information Systems (JOMIS) requirements in accordance with the updated acquisition strategy approved in January 2021:

-- Maintenance of new capabilities that are added to the suite of operational medicine information systems as part of the JOMIS capability roadmap developed in coordination with the Functional Champion that enables continuous evolution and delivery of products to users and quality of the user experience

-- Continued funding of software development that will occur beyond the first minimum viable capability release in alignment with software development life cycle principles of the software acquisition pathway and the JOMIS capability roadmap

-- Funding of IT Management and testing support for software development beyond the first minimum viable capability release in alignment with software development life cycle principles of the software acquisition pathway and the JOMIS capability roadmap The FY 2022 JOMIS program element baseline funding is \$118,658K. The FY 2022 JOMIS program element baseline contractor staffing is 360 CMEs.

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III. Financial Summary (\$ in Thousands): (Cont.)

2) b. IM/IT Resources Realigned to Health Information Technology\$33,662
 Realigns funding and FTEs (+\$33,662K; +\$281 FTEs) to Service Medical IM/IT from Army Medical Command, In-House Care for identified IT support FTEs assigned to each Military Treatment Facilities (MTF). The FY 2022 Service Medical IM/IT baseline funding is \$128,073K. The FY 2022 Service Medical IM/IT baseline civilian staffing is 858 FTEs.

3) c. Department of Defense Healthcare Management System Modernization:\$24,289
 Continues DoD Healthcare Management System Modernization (DHMSM) funding for the MHS GENESIS Electronic Health Record (EHR) systems operations and support for the following actions:

- Maintenance of new capabilities that are added to MHS GENESIS as part of the DHMSM capability roadmap developed in coordination with the Functional Champion and released in "Capability Blocks" that are coordinated with the Go-Lives of Wave deployments
- Continued ramp-up of data center hosting and license maintenance costs to support additional users on MHS GENESIS as the system continues to be deployed based on the Program Executive Office for Defense Healthcare Management System (PEO DHMS) updated and approved deployment schedule and estimates
- Additional sustainment trainers to support an additional region of MHS GENESIS users as the system continues to be deployed based on the Program Executive Office for Defense Healthcare Management System (PEO DHMS) updated and approved deployment schedule and estimates

The FY 2022 DHMSM program element baseline funding is \$526,535K. The FY 2022 DHMSM program element baseline contractor staffing is 2,103 CMEs.

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III. Financial Summary (\$ in Thousands): (Cont.)

4) d. Integrated Electronic Health Record:\$11,352

Increase IT contracts support services funds in Information Management/Information Technology, Integrated Electronic Health Record (iEHR) program element for building capacity and expertise to effectively manage the DoD/VA joint system configuration that ensures technical health system requirements meet provider and patient needs. The increase in requirements follows the directed mission to integrate and find efficiencies between the DoD and VA Program Management Offices. Funds buy IT Contract support services to address and coordinate the establishment of a clinical and technical standards profile and processes for data interoperability to create seamless integration of health data for DoD and VA. The primary deliverables include technical data interoperability architecture requirements, interface control documentation, terminology standards identification and data exchange guidance. The FY 2022 iEHR program element baseline funding is \$10,429K. The FY 2022 iEHR program element baseline contractor staffing is 4 CMEs.

5) e. Computer Network Defense Services:\$4,869

Increased funding to support Cyber Security Service Provider (CSSP) requirements/growth due to increased customer base with the transition of the Medical Treatment Facilities and other lines of business to the Medical Community of Interest (MEDCOI), additional software licenses, and hardware purchases. The FY 2022 Cybersecurity program element baseline funding is \$140,663K. The FY 2022 Cybersecurity program element baseline contractor staffing is 509 CMEs.

9. Program Decreases\$-177,817

a) Annualization of FY 2022 Program Decreases\$0

b) One-Time FY 2022 Increases\$0

c) Program Decreases in FY 2023 \$-177,817

1) a. Software and Digital Technology Budget Activity 08:..... \$-127,208

Realigns funds from Operations and Maintenance, Information Management/Information Technology, DoD Medical Information Exchange and Interoperability (DMIX) (-\$127,208K) to Research, Development, Test, and Evaluation appropriation to establish the Software & Digital Technology Budget Activity (BA) 08 Pilot. The creation of the new Software & Digital Technology Budget Activity allows software capability delivery to be funded as a single budget line item, with no separation between RDT&E, production and sustainment. The FY 2022 DoD Medical Information Exchange and Interoperability baseline funding is \$113,925K. The FY 2022 DMIX program element baseline contractor staffing is 483 CMEs.

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III. Financial Summary (\$ in Thousands): (Cont.)

2) b. MHS IM/IT Legacy Sustainment:..... \$-48,691
 Reduces the MHS IM/IT Legacy sustainment funding in the Tri-Service IM/IT program element as the Defense Health Agency implement consolidation measures to reduce Infrastructure costs at the Military Treatment Facilities and the Defense Health Agency. The Defense Health Agency reduce IM/IT contracts support services funds through consolidation of IT contracts at the Defense Health Agency and optimizing infrastructure through common architecture. Ongoing efforts by the Deputy Assistant Director, Information Operations (DADIO) within the Defense Health Agency and with the Military Treatment Facilities to identify, consolidate, and reduce redundant contracts and operate on a common architecture allows for the reduction in IT contracts support services funding. The FY 2022 Tri-Service IM/IT program element funding is \$867,442K. The FY 2022 Tri-Service IM/IT program element baseline contractor staffing is 657 CMEs.

3) c. Deputy Assistant Director Information Operations Headquarters Realigned to Management Activities: \$-1,918
 Realigns funding and FTEs from Information Management/Information Technology, Desktop to Datacenter (-\$1,679K; -14 FTEs) and Cybersecurity (-\$239K; -2 FTEs) program elements to Management Activities, Management Headquarters (+\$1,918K; +16 FTEs) program element to support the Deputy Assistant Director Information Operations Information Management/Information Technology headquarters functions. The FY 2022 Information Management/Information Technology baseline funding is \$2,231,149K. The FY 2022 Information Management/Information Technology baseline civilian staffing is 1,547 FTEs.

FY 2023 Budget Request \$2,251,151

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IV. Performance Criteria and Evaluation Summary:

The Information Management/Information Technology (IM/IT) workload data presented in the Performance Criteria and Evaluation Summary section is designed to give greater insight and a clearer depiction of the Defense Health Agency's IM/IT work for: (1) Military Treatment Facility IT Support; (2) MHS Enterprise Cyber Security Support; (3) Defense Health Agency Global Service Center; (4) Desktop to Datacenter and Medical Community of Interest (Med-COI) Deployments; (5) DoD Healthcare Management Systems Modernization (DHMSM) planned deployment schedule (6) DOD Medical Information Exchange and Interoperability (DMIX); (7) Theater Medical Information – Joint (TMIP-J); Joint Operational Medicine Information System; and Enterprise Intelligence and Data Solutions (EIDS) MHS Information Platform (MIP).

Workload Description by Program	FY 2021 Actuals	FY 2022 Enacted	FY 2023 Estimate
Military Treatment Facility IT Support			
1. Provide software, hardware, and network IT support for enterprise systems at DoD medical headquarters, hospitals and medical clinics worldwide, as appropriate, to achieve operational benefits. Systems support is provided for outpatient encounters, inpatient stays, prescription issuance and management, laboratory orders and results, medical records management, claims processing, patient appointing and scheduling, medical logistics services, patient safety reporting, medical workload management, clinical data analysis, nutrition care services, blood management, staff credentialing, medical coding, medical surveillance, surgical scheduling, and more.	60 systems	50 systems	52 systems
2. Desktop to Datacenter migration of end user devices.	124,014	10,534	0
3. Shutdown/Decommission (end operational use) legacy systems that will be replaced by MHS GENESIS (site instances of systems)	23 site instances of systems	100 site instances of systems	200 site instances of systems
MHS Enterprise Services Cyber Security Support			
1. Manage cybersecurity status of systems (including networks and medical devices) enrolled in Risk Management Framework throughout the MHS)	1009	1040	1065
2. Implement required cyber security patches (number of patches to be required cannot be determined in advance)	80%	90%	90%

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IV. Performance Criteria and Evaluation Summary:

Workload Description by Program	FY 2021 Actuals	FY 2022 Enacted	FY 2023 Estimate
Defense Health Agency (DHA) Global Service Center (GSC)			
<p>1. Provide enterprise help desk services in support of the MHS systems and network. Manage and resolve 95% of Critical (Priority 1) incidents within 90 minutes.</p> <p>[Equation: {Number of "Priority 1" incidents resolved or escalated within the 90 minute time constraint in the period of interest/Total number of "Priority 1" incidents in the period of interest} x 100. Priority categories based on type of problem and number of users affected]</p>	230 Priority 1 Incidents ≥95%	350 Priority 1 Incidents ≥95%	375 Priority 1 Incidents ≥95%
2. Survey DHA Global Service Center Users, gaining a Satisfaction Survey Score of at least 4.0 of 5.0 on survey responses	50,000 survey responses	60,000 survey responses	75,000 survey responses
Desktop to Datacenter (D2D) and Medical Community of Interest (Med-COI) Deployments			
1. Deploy D2D and Med-COI so sites are MHS GENESIS ready (Sites that are MHS GENESIS ready have had all infrastructure work completed that is necessary for installation of MHS GENESIS and all MHS GENESIS required systems have been migrated)	70	18	0
2. Complete updates so that sites are Totally Cutover (Sites that are Totally Cutover have had all infrastructure work completed that is required to consider all aspects of Desktop to Datacenter (D2D) and Medical Community of Interest (Med-COI) implementation fully completed and implemented)	70	18	0

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IV. Performance Criteria and Evaluation Summary:

Workload Description by Program	FY 2021 Actuals	FY 2022 Enacted	FY 2023 Estimate
DoD Healthcare Management Systems Modernization (DHMSM) (Planned Deployment Schedule)			
1. Measure and determine MHS GENESIS' ability to scale the number of users up without deterioration of the average log in response time and average transaction response time. Measure the percentage of users able to login in and complete transactions in less than two (2) seconds.	96.93%	95.00%	95.00%
2. System Operational Availability assesses the total time the system is capable of being used to perform clinical functions during a given interval – excluding scheduled downtimes. (Percentage)	73.33%	65.00%	65.00%
DoD Medical Information Exchange and Interoperability (DMIX)			
1. Percentage of population with Joint Legacy Viewer (JLV) access using JLV.	37.70%	30.00%	30.00%
2. Retrieve patient-centric information pulled from disparate healthcare systems in real time for presentation in a browser in less than two (2) minutes. (Percentage) Reason: helps check the performance of related healthcare systems. This information helps to assess improvements/changes or updates to the system being evaluated. For example, a new patch could improve response times and having these measurements will help to see the improvement.	98.99%	90.00%	90.00%
3. Software availability from an end user perspective - not counting scheduled downtime - as well as platform and network availability (DES/JLV). (Percentage)	99.51% / 97.83%	93.00% / 93.00%	93.00% / 93.00%

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IV. Performance Criteria and Evaluation Summary:

Workload Description by Program	FY 2021 Actuals	FY 2022 Enacted	FY 2023 Estimate
Enterprise Intelligence and Data Solutions (EIDS) MHS Information Platform (MIP). Measures calculated per MIP Post-Implementation Review Plan			
1. System Availability – Clinical Care Functions: System uptime (including scheduled downtime) for MIP functions that support direct clinical care, e.g., Legacy Data Consolidation. (Percentage)	99.58%	99.86%	99.86%
2. System Availability – Non-Clinical Functions: System uptime (excluding scheduled downtime) for MIP functions that don't support direct clinical care, e.g., non-Legacy Data Consolidation. (Percentage)	98.09%	98.5%	98.5%
Theater Medical Information Program – Joint (TMIP-J)			
1. Availability: Percentage of time the system is available not counting unscheduled downtime (Percentage)	99%	N/A	N/A
2. Reliability: Number of Tier III trouble tickets received monthly – tickets are related to software code updates only	<5	N/A	N/A
3. Maintainability: Time to implement trouble tickets (Metric ID OP1913-5006)	<2 Qtrs	N/A	N/A
Joint Operational Medicine Information System/Medical Common Operating Picture (MedCOP)			
1. Availability: Percentage of time the system is available not counting unscheduled downtime (Percentage)	99%	99%	99%
2. Reliability: Number of Tier III trouble tickets received monthly – tickets are related to software code updates only	<1	<5	<5
3. Maintainability: Time to implement trouble tickets (Metric ID OP1913-5006)	<72 Hours	<72 Hours	<72 Hours

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V. Personnel Summary:

	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Change FY 2021/ FY 2022</u>	<u>Change FY 2022/ FY 2023</u>
Active Military End Strength (E/S) (Total)	409	437	372	28	-65
Officer	85	91	59	6	-32
Enlisted	324	346	313	22	-33
Active Military Average Strength (A/S) (Total)	422	423	405	1	-18
Officer	92	88	75	-4	-13
Enlisted	330	335	330	5	-5
Civilian FTEs (Total)	1,627	1,547	1,962	-80	415
U.S. Direct Hire	1,593	1,501	1,908	-92	407
Foreign National Direct Hire	13	16	26	3	10
Total Direct Hire	1,606	1,517	1,934	-89	417
Foreign National Indirect Hire	21	30	28	9	-2
Average Annual Civilian Salary (\$ in thousands)	139.0	138.3	137.5	-0.7	-0.8
Contractor FTEs (Total)	4,465	5,279	5,219	814	-60

Personnel Summary Explanations:

Explanation of changes in Active Military End Strength: The net increase from FY 2021 to FY 2022 (+28) reflects execution adjustments (+33: Air Force +15, Army -2, and Navy +20) and includes the technical adjustment made by the military departments for the revised drawdown reductions (Army -1 and Air Force -4) to comply with Section 719 of the FY 2020 National Defense Authorization Act (NDAA) that limits the realignment or reduction of military medical end strength authorizations and to reflect executable Service plans for the drawdown. The net decrease from FY 2022 to FY 2023 (-65) includes internal realignments to Executive Agent Share Services (Army -9), internal realignment by Navy Medical (-27), transfer non-MTF resources (Air Force -6), the Defense Wide Review Army Readiness transfer to Army MEDCOM (-4), and re-alignment of the Transfer Hospital Ship from Navy BUMED to the Medical Sealift Command (-6). Technical adjustment made by the military departments for the revised drawdown reductions to comply with Section 719 of the FY 2020 National Defense Authorization Act (NDAA) account for the additional resources (Navy -13). This Act limits the realignment or reduction of military medical end strength authorizations and reflects executable Service plans for the drawdown.

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V. Personnel Summary: (Cont.)

Explanation of changes in Civilian FTEs: The net decrease from FY 2021 to FY 2022 (-80) reflects execution adjustments (-90: DHA-Comptroller +51, DCFM +9, Navy -7, Air Force -17, and Army -126); the return of FTEs only to the Defense Health Agency from Defense Information Systems Agency (DISA) for the Fourth Estate Network Optimization (+31); adjustment to USUHS' reimbursable FTEs to match program execution (+9); decreases due to Desktop to Data Center reductions within the Military Health System IM/IT Infrastructure at the Army Medical Command (-24) and the Navy Bureau of Medicine and Surgery (-5); FTE realignments from Army Medical Command (-10) to the DHA National Capital Region Directorate (+10) for Phase One (1) of the implementation of Section 702 of the FY 2017 NDAA; and Defense Health Agency internal realignment for the Management Information Platform (-1). The net increase from FY 2022 to FY 2023 (+415) reflects the transfer of civilian FTEs to the Department of the Army for medical readiness (-24); reprogramming of civilian FTEs to Management Activities for Deputy Assistant Director Information Operations Headquarters functions (-16); an increase in FTEs for the Program Executive Office (PEO) to match actual execution resulting from programmatic growth requiring additional FTEs (+22: IEHR/FEHRM: +10; DMIX/EIDS: +8; DHMSM: +4); transfer of Military Treatment Facilities FTEs from Department of Army (DCFM +294), realignment of FTEs from Navy BUMED for IM/IT support (+8), and internal realignment from other BAGs (Navy +130 and Air Force +1).

Explanation of changes in Contractor FTEs: The increase from FY 2021 to FY 2022 (+814) reflects continued increases for DHMS PEO to deploy the Military Health System GENESIS (+887), ongoing efficiencies achieved through consolidation of infrastructure and legacy systems, (-73) and a net zero realignment of TMIP-J contracts funding to JOMIS to standardize accounting for budgeting and execution of TMIP-J and JOMIS contracts under one consolidated JOMIS program. The decrease from FY 2022 to FY 2023 (-60) reflects ongoing efficiencies achieved through consolidation of infrastructure and legacy systems.

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VI. OP 32 Line Items as Applicable (Dollars in thousands):

	FY 2021 <u>Program</u>	<u>Change from FY 2021 to FY 2022</u>		FY 2022 <u>Program</u>	<u>Change from FY 2022 to FY 2023</u>		FY 2023 <u>Program</u>
		<u>Price Growth</u>	<u>Program Growth</u>		<u>Price Growth</u>	<u>Program Growth</u>	
101 EXEC, GEN'L & SPEC SCHEDS	222,426	5,049	-19,675	207,800	8,572	48,350	264,722
103 WAGE BOARD	1,175	27	1,763	2,965	122	-2,789	298
104 FN DIRECT HIRE (FNDH)	1,219	28	-140	1,107	46	1,433	2,586
105 SEPARATION LIABILITY (FNDH)	16	0		16	1	-17	0
107 VOLUNTARY SEP INCENTIVES	0	0	0	0	0	20	20
0199 TOTAL CIVILIAN PERSONNEL COMPENSATION	224,836	5,104	-18,052	211,888	8,741	46,997	267,626
308 TRAVEL OF PERSONS	2,412	72	1,169	3,653	77	789	4,519
0399 TOTAL TRAVEL	2,412	72	1,169	3,653	77	789	4,519
401 DLA ENERGY (FUEL PRODUCTS)	2	0	-2	0	0	0	0
416 GSA SUPPLIES & MATERIALS	0	0	0	0	0	770	770
417 LOCAL PURCH SUPPLIES & MAT	0	0	0	0	0	517	517
0499 TOTAL DEFENSE WORKING CAPITAL FUND SUPPLIES AND MATERIALS	2	0	-2	0	0	1,287	1,287
503 NAVY FUND EQUIPMENT	0	0	0	0	0	92	92
507 GSA MANAGED EQUIPMENT	0	0	0	0	0	1,066	1,066
0599 TOTAL DEFENSE WORKING CAPITAL FUND EQUIPMENT PURCHASES	0	0	0	0	0	1,158	1,158
614 SPACE & NAVAL WARFARE CENTER	0	0	5,716	5,716	161	2,034	7,911
631 NAVY BASE SUPPORT (NFESC)	0	0	376	376	-2	10	384
647 DISA ENTERPRISE COMPUTING CENTERS	97,379	1,948	-11,742	87,585	1,752	-31,094	58,243
671 DISA DISN SUBSCRIPTION SERVICES (DSS)	83,323	6,358	-55,582	34,099	1,098	-507	34,690
680 BUILDING MAINT FUND PURCH	0	0	93	93	1	1	95
0699 TOTAL OTHER FUND PURCHASES	180,702	8,306	-61,139	127,869	3,010	-29,556	101,323
707 AMC TRAINING	287	2	-289	0	0	0	0
771 COMMERCIAL TRANSPORT	102	3	-66	39	0	1	40

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VI. OP 32 Line Items as Applicable (Dollars in thousands):

	FY 2021 Program	Change from FY 2021 to FY 2022		FY 2022 Program	Change from FY 2022 to FY 2023		FY 2023 Program
		Price Growth	Program Growth		Price Growth	Program Growth	
0799 TOTAL TRANSPORTATION	389	5	-355	39	0	1	40
901 FOREIGN NATIONAL INDIRECT HIRE (FNIH)	1,319	30	665	2,014	42	27	2,083
912 RENTAL PAYMENTS TO GSA (SLUC)	72	2	-74	0	0	0	0
913 PURCHASED UTILITIES (NON-FUND)	19	1	-20	0	0	0	0
914 PURCHASED COMMUNICATIONS (NON-FUND)	530	16	13,334	13,880	291	2,636	16,807
915 RENTS (NON-GSA)	1,606	48	-1,270	384	8	-1	391
917 POSTAL SERVICES (U.S.P.S)	1,295	39	-1,334	0	0	0	0
920 SUPPLIES & MATERIALS (NON-FUND)	1,923	58	12,225	14,206	298		14,504
921 PRINTING & REPRODUCTION	45	1	-46	0	0	2,062	2,062
922 EQUIPMENT MAINTENANCE BY CONTRACT	1,102	33	-403	732	15	2,400	3,147
923 FACILITIES SUST, REST, & MOD BY CONTRACT	3,397	102	-3,458	41	1	0	42
925 EQUIPMENT PURCHASES (NON-FUND)	73,768	2,213	39,700	115,681	2,429	-15,835	102,275
932 MGT PROF SUPPORT SVCS	79,984	2,400	-8,571	73,813	1,550	1,155	76,518
933 STUDIES, ANALYSIS & EVAL	18,825	565	-16,103	3,287	69	-2	3,354
934 ENGINEERING & TECH SVCS	46,216	1,386	-44,001	3,601	76	-2	3,675
955 OTHER COSTS (MEDICAL CARE)	157,698	6,466	-164,164	0	0	0	0
959 OTHER COSTS (INSURANCE CLAIMS/INDMNTIES)	25	0	-25	0	0	0	0
960 OTHER COSTS (INTEREST AND DIVIDENDS)	4,385	0	-4,224	161	3		164
986 MEDICAL CARE CONTRACTS	8,892	365	10,198	19,455	778		20,233
987 OTHER INTRA-GOVT PURCH	110,398	3,312	-1,253	112,457	2,362	-9,542	105,277
989 OTHER SERVICES	16,235	487	-15,446	1,276	27	3,440	4,743
990 IT CONTRACT SUPPORT SERVICES	1,289,196	38,676	198,840	1,526,712	32,061	-38,850	1,519,923
0999 TOTAL OTHER PURCHASES	1,816,930	56,200	14,570	1,887,700	40,010	-52,512	1,875,198
9999 GRAND TOTAL	2,225,271	69,687	-63,809	2,231,149	51,838	-31,836	2,251,151

1. FY 2023 net increase in OP32 line 101 is attributed to the realignment of Service Medical IM/IT Resources Realigned from Army Medical Command to Health Information Technology and the Army Medical Research, Development and Acquisition Capabilities transfer in to the Defense Health Agency. (415 FTEs)

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I. Description of Operations Financed:

This Budget Activity Group is comprised of the Defense Health Agency's Medical Headquarters; and the Defense Health Agency's functions supporting Military Health System worldwide patient care delivery.

Defense Health Agency - Resources required for the Defense Health Agency's (DHA) operating costs supporting delivery of patient care worldwide for members of the Armed Forces, family members, and others entitled to Department of Defense (DoD) health care. Oversees and maintains DoD Unified Medical Program resources for all medical activities. More specifically, the resources support headquarters functions, which include the cost of operating the DHA and centrally managed requirements supporting the delivery of services healthcare services.

Management Headquarters - Resources required for the Defense Health Agency management headquarters operating costs to coordinate and oversee the provision of health care within the Military Health System.

II. Force Structure Summary:

Force Structure Summary: Management Activities includes resources necessary to support headquarters functions outlined in DoD Instruction 5100.73, Major Department of Defense Headquarters Activities. Within the Military Health System, this includes the cost of operating the acquisition, administration, audiovisual, audit, cost analysis, data automation, financial management, information and public affairs, legal and legislative affairs, logistics, management analysis, manpower and organization, personnel, and security programs at the Defense Health Agency, the Army Medical Command, the Navy Bureau of Medicine and Surgery, and the Air Force Medical Service.

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III. Financial Summary (\$ in Thousands):

	FY 2021 <u>Actuals</u>	Budget <u>Request</u>	FY 2022 <u>Congressional Action</u>			Current <u>Enacted</u>	FY 2023 <u>Request</u>
			<u>Amount</u>	<u>Percent</u>	<u>Appropriated</u>		
<u>A. BA Subactivities</u>							
Defense Health Agency	\$240,996	\$253,449	\$-2,000	-0.79%	\$251,449	\$251,449	\$253,495
Management Headquarters	<u>\$96,729</u>	<u>\$81,689</u>	<u>\$0</u>	<u>0.00%</u>	<u>\$81,689</u>	<u>\$81,689</u>	<u>\$85,183</u>
Total	\$337,725	\$335,138	\$-2,000	-0.60%	\$333,138	\$333,138	\$338,678

FY 2021 actuals includes +\$8,142K reprogrammed to Management Activities for unfunded requirements.

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III. Financial Summary (\$ in Thousands): (Cont.)

<u>B. Reconciliation Summary</u>	<u>Change FY 2022/FY 2022</u>	<u>Change FY 2022/FY 2023</u>
BASELINE FUNDING	\$335,138	\$333,138
Congressional Adjustments (Distributed)	-2,000	
Congressional Adjustments (Undistributed)	0	
Adjustments to Meet Congressional Intent	0	
Congressional Adjustments (General Provisions)	0	
SUBTOTAL APPROPRIATED AMOUNT	333,138	
Fact-of-Life Changes (2022 to 2022 Only)	0	
SUBTOTAL BASELINE FUNDING	333,138	
Supplemental	0	
Reprogrammings	0	
Price Changes		11,824
Functional Transfers		495
Program Changes		-6,779
CURRENT ESTIMATE	333,138	338,678
Less: Supplemental	0	
NORMALIZED CURRENT ESTIMATE	\$333,138	\$338,678

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III. Financial Summary (\$ in Thousands): (Cont.)

FY 2022 President's Budget Request (Amended, if applicable)	\$335,138
1. Congressional Adjustments	\$-2,000
a) Distributed Adjustments.....	\$-2,000
1) a. Excess Growth Equipment:	\$-2,000
b) Undistributed Adjustments.....	\$0
c) Adjustments to Meet Congressional Intent.....	\$0
d) General Provisions	\$0
FY 2022 Appropriated Amount	\$333,138
2. Supplemental Appropriations	\$0
a) Supplemental Funding.....	\$0
3. Fact-of-Life Changes.....	\$0
a) Functional Transfers.....	\$0
b) Technical Adjustments	\$0
c) Emergent Requirements.....	\$0
FY 2022 Baseline Funding	\$333,138

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III. Financial Summary (\$ in Thousands): (Cont.)

4. Reprogrammings (Requiring 1415 Actions)	\$0
a) Increases	\$0
b) Decreases	\$0
Revised FY 2022 Estimate	\$333,138
5. Less: Item 2, Supplemental Appropriation and Item 4, Reprogrammings	\$0
a) Less: Supplemental Funding	\$0
FY 2022 Normalized Current Estimate	\$333,138
6. Price Change	\$11,824
7. Functional Transfers	\$495
a) Transfers In	\$495
1) Continuous Process Improvement/Lean Six Sigma (LSS) Training Team:	\$495
Transfer of funding and FTEs (\$495K, 4 FTEs) associated with the Continuous Process Improvement (CPI)/Lean Six Sigma (LSS) Training Team from Department of the Army. Team will provide quality and cost-effective improvement sciences training to medical facilities worldwide.	
b) Transfers Out	\$0
8. Program Increases	\$2,103
a) Annualization of New FY 2022 Program	\$0

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III. Financial Summary (\$ in Thousands): (Cont.)

b) One-Time FY 2023 Increases\$0

c) Program Growth in FY 2023\$2,103

1) a. Deputy Assistant Director Information Operations Headquarters Functions Realigned to Management Activities:.....\$1,918
 Realigns funding for 16 FTEs (+1,918K) to Management Activities, Management Headquarters program element from Information Management/Information Technology, Desktop to Datacenter (-\$1,679K; -14 FTEs) and Cybersecurity (-\$239K; -2 FTEs) program elements to support the Deputy Assistant Director Information Operations Information Management/Information Technology headquarters functions. The FY 2022 Management Headquarters program element baseline funding is \$81,689K. The FY 2022 Management Headquarters program element baseline civilian staffing is 348 FTEs.

2) b. Anomalous Health Incidents:.....\$185
 Funding supports the FY 2022 NDAA (P. L. 117-81, Sec 732, 10 U. S. C. 1071 note), Access by United States Government Employees and their Family Members to Certain Facilities of Department of Defense for Assessment and Treatment of Anomalous Health Conditions, which ensures that individuals affected by anomalous health incidents (as defined by the Secretary of Defense) receive timely and comprehensive health care and treatment. Funds one FTE in the Management Activities Budget Activity group for program oversight. The FY 2022 Defense Health Agency program element baseline funding is \$251,449K. The FY 2022 Defense Health Agency program element baseline civilian staffing is 1,326 FTEs.

9. Program Decreases\$-8,882

a) Annualization of FY 2022 Program Decreases\$0

b) One-Time FY 2022 Increases\$0

c) Program Decreases in FY 2023 \$-8,882

1) a. Defense Health Regions, Markets and Stand-Alone Offices: \$-8,352
 Realigns funding and FTEs to Consolidated Health Support from Management Activities, (-\$8,352K; -57 FTEs) to support the standup of the Defense Health Regions, Markets and Stand-Alone Offices (SSOs) supporting the respective healthcare missions. The FY 2022 Defense Health Agency program element baseline funding is \$251,449K. The FY 2022 Defense Health Agency program element baseline civilian staffing is 1,326 FTEs.

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III. Financial Summary (\$ in Thousands): (Cont.)

2) b. Defense Health Program Reform Management – Services Efficiencies:..... \$-530

Reduces Management Activities contract requirements funding through Military Health System enterprise-wide efforts to consolidate contracts and to increase contract standardization, elimination of duplicative contracts, leveraging market buying power, and continued use of nationwide contracting sources. The Defense Health Agency and the Services’ Medical Activities conducted a comprehensive review of contracts requirements that resulted in savings derived from reform efforts in category management and Service commodity efficiencies within the Defense Health Program appropriation. Funds are reduced from the Management Headquarters program element. The FY 2022 Management Headquarters baseline funding request is \$81,689K. The FY 2022 Management Headquarters baseline contractor staffing is 76 CMEs.

FY 2023 Budget Request \$338,678

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IV. Performance Criteria and Evaluation Summary:

Refer to the Personnel Summary in Section V.

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V. Personnel Summary:

	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Change FY 2021/ FY 2022</u>	<u>Change FY 2022/ FY 2023</u>
Active Military End Strength (E/S) (Total)	603	719	767	116	48
Officer	397	494	531	97	37
Enlisted	206	225	236	19	11
Active Military Average Strength (A/S) (Total)	618	662	744	44	82
Officer	400	446	513	46	67
Enlisted	218	216	231	-2	15
Civilian FTEs (Total)	1,381	1,674	1,529	293	-145
U.S. Direct Hire	1,378	1,669	1,524	291	-145
Total Direct Hire	1,378	1,669	1,524	291	-145
Foreign National Indirect Hire	3	5	5	2	0
Average Annual Civilian Salary (\$ in thousands)	143.5	139.1	155.3	-4.4	16.2
Contractor FTEs (Total)	438	330	330	-108	0

Personnel Summary Explanations:

Explanation of changes in Active Military End Strength: The net decrease from FY 2021 to FY 2022 (+116) reflects execution adjustments (+575: Army +37, Navy +12, and Air Force +526) and includes the technical adjustment made by the military departments for the revised drawdown reductions (Navy -6 and Air Force -453) to comply with Section 719 of the FY 2020 National Defense Authorization Act (NDAA) that limits the realignment or reduction of military medical E/S authorizations and to reflect executable Service plans for the drawdown. The net increase from FY 2022 to FY 2023 (+48) reflects the addition of the Army's first Reserve Officer (+1), the transfer of the Armed Forces Pest Management Board (AFPM) in accordance with DOD Public Health governance (Army +3), internal realignments for Military Training Network (MTN) program (+8: Navy +2, Air Force +5, and Army +1), internal realignment of Executive Agent Share (Army +36), internal realignment from Navy medicine (+2), transfer of Headquarter FTEs to Navy (-3) and the technical adjustment made by the military departments for the revised drawdown reductions (Army +1) to comply with Section 719 of the FY 2020 National Defense Authorization Act (NDAA) that limits the realignment or reduction of military medical end strength authorizations and to reflect executable Service plans for the drawdown.

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V. Personnel Summary: (Cont.)

Explanation of changes in Civilian FTEs: The net increase from FY 2021 to FY 2022 (+293) results from Service headquarters execution adjustments (+148: DHA-Comptroller +55, Navy +108, and Army -15); an increase in civilian FTEs in support of section 702 of the FY 2017 National Defense Authorization Act (+147); Defense Health Agency internal realignments for the Management Information Platform (+1); and a decrease for the Safety and Occupational Health Program (-3). The net decrease from FY 2022 to FY 2023 (-145) reflects the realignment of FTEs from Information Management Information Technology for the Deputy Assistant, Director Information Operations Headquarters functions (+16), realignment of FTEs only to Consolidated Health Support for the Stand Alone Support Offices (SSO) and the Defense Health Regions (DHR) supporting the respective healthcare missions (-57); transfer of FTEs to support Continuous Process Improvement (CPI)/Lean Six Sigma (LSS) policy development and training (+4); and the internal realignment of from other BAGs (Navy -108).

Explanation of changes in Contractor FTEs: The decrease from FY 2021 to FY 2022 (-108) reflects continued decreases to advisory and assistance services contracts for ongoing consolidation of services at the Defense Health Agency in accordance with the FY 2017 National Defense Authorization Act Section 702 and realignment of contract dollars to funds civilian personnel increases. There is no change from FY 2022 to FY 2023.

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VI. OP 32 Line Items as Applicable (Dollars in thousands):

	FY 2021 <u>Program</u>	<u>Change from FY 2021 to FY 2022</u>		FY 2022 <u>Program</u>	<u>Change from FY 2022 to FY 2023</u>		FY 2023 <u>Program</u>
		<u>Price Growth</u>	<u>Program Growth</u>		<u>Price Growth</u>	<u>Program Growth</u>	
101 EXEC, GEN'L & SPEC SCHEDS	198,101	4,497	29,055	231,653	9,556	-5,112	236,097
103 WAGE BOARD	115	3	1,073	1,191	49	186	1,426
107 VOLUNTARY SEP INCENTIVES	0	0	40	40	2	-42	0
110 UNEMPLOYMENT COMPENSATION	0	0	5,830	5,830	240		6,070
0199 TOTAL CIVILIAN PERSONNEL COMPENSATION	198,216	4,500	35,998	238,714	9,847	-4,968	243,593
308 TRAVEL OF PERSONS	2,695	81	1,260	4,036	85	-20	4,101
0399 TOTAL TRAVEL	2,695	81	1,260	4,036	85	-20	4,101
412 NAVY MANAGED SUPPLY, MATL	0	0	2	2	0		2
417 LOCAL PURCH SUPPLIES & MAT	0	0	500	500	11	-1	510
0499 TOTAL DEFENSE WORKING CAPITAL FUND SUPPLIES AND MATERIALS	0	0	502	502	11	-1	512
647 DISA ENTERPRISE COMPUTING CENTERS	1,639	33	-1,672	0	0	0	0
0699 TOTAL OTHER FUND PURCHASES	1,639	33	-1,672	0	0	0	0
707 AMC TRAINING	207	1	-208	0	0	0	0
771 COMMERCIAL TRANSPORT	70	2	171	243	0	5	248
0799 TOTAL TRANSPORTATION	277	3	-37	243	0	5	248
914 PURCHASED COMMUNICATIONS (NON-FUND)	47	1	-38	10	0		10
915 RENTS (NON-GSA)	0	0	30	30	1	0	31
917 POSTAL SERVICES (U.S.P.S)	0	0	448	448	9		457
920 SUPPLIES & MATERIALS (NON-FUND)	163	5	929	1,097	23	172	1,292
921 PRINTING & REPRODUCTION	40	1	549	590	12	4	606
922 EQUIPMENT MAINTENANCE BY CONTRACT	2	0	231	233	5	-10	228
925 EQUIPMENT PURCHASES (NON-FUND)	663	20	683	1,366	29	38	1,433
932 MGT PROF SUPPORT SVCS	59,668	1,790	-15,440	46,018	966	-498	46,486

**Defense Health Program
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VI. OP 32 Line Items as Applicable (Dollars in thousands):

	FY 2021 Program	Change from FY 2021 to FY 2022		FY 2022 Program	Change from FY 2022 to FY 2023		FY 2023 Program
		Price Growth	Program Growth		Price Growth	Program Growth	
933 STUDIES, ANALYSIS & EVAL TRAINING AND LEADERSHIP DEVELOPMENT (OTHER CONTRACTS)	27,287	819	-20,991	7,115	149	-299	6,965
936	202	6	-208	0	0	0	0
955 OTHER COSTS (MEDICAL CARE)	2,751	113	-2,855	9	0	1	10
959 OTHER COSTS (INSURANCE CLAIMS/INDMNTIES) OTHER COSTS (SUBSISTENCE AND SUPPORT OF PERSONS)	55	0	-55	0	0	0	0
964	15	0	-15	0	0	0	0
986 MEDICAL CARE CONTRACTS	0	0	0	0	0	185	185
987 OTHER INTRA-GOVT PURCH	19,950	599	-7,477	13,072	275	-13	13,334
989 OTHER SERVICES	23,458	704	-6,479	17,683	371	-777	17,277
990 IT CONTRACT SUPPORT SERVICES	597	18	1,357	1,972	41	-103	1,910
0999 TOTAL OTHER PURCHASES	134,898	4,076	-49,331	89,643	1,881	-1,300	90,224
9999 GRAND TOTAL	337,725	8,693	-13,280	333,138	11,824	-6,284	338,678

**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2023 President's Budget
Education and Training OP-5 Exhibit**

I. Description of Operations Financed:

This Budget Activity Group is comprised of two primary categories that provide support for education and training opportunities for personnel funded by the Defense Health Program:

Uniformed Services University of the Health Sciences (USUHS) - Resources required for operation and maintenance of the Department of Defense funded university that produces physicians, advanced practice nurses, advanced practice dentists and other health professionals from the School of Medicine, Graduate School of Nursing, Postgraduate Dental College, College of Allied Health Sciences, National Capital Area Graduate Medical Education Residency Programs and Graduate Education Programs leading to undergraduate, masters or doctoral degrees in medicine, dentistry, nursing, public health, healthcare administration, clinical psychology and the health and biomedical sciences.

Other Education and Training - Resources required for specialized skills training and professional development education programs for health care personnel at the Medical Education and Training Campus (METC), San Antonio, Texas; U.S. Army Medical Department Center and School, Fort Sam Houston, Texas; School of Aerospace Medicine, Wright-Patterson Air Force Base, Ohio; Air Force medical professions education and training programs and Navy Bureau of Medicine and Surgery sponsored schools. Also includes educational programs for health care personnel at federal and private sector academic institutions and medical facilities. Professional development provides officer, enlisted and civilian medical personnel with the specialized skills and knowledge required to perform highly technical health service missions. Other Education and Training funds for medical readiness training functions transferred in FY 2021 to the Departments of the Air Force, Army and Navy in accordance with the Defense Wide Review actions to transfer medical readiness functions outside of medical treatment facilities to the respective military departments.

II. Force Structure Summary:

Education and Training resources provide tuition and other educational expenses for specialized skills training and professional development education programs for health care personnel, as well as educational programs for health care personnel at federal and private sector academic institutions and medical facilities. USUHS resources fund operation and maintenance requirements necessary to operate a DoD-funded medical school that trains doctors; offers graduate programs for nurses and professionals in the biological sciences; provides professional development education, undergraduate degree programs through the USUHS-METC Affiliation, specialized skills training and other training necessary to accomplish the mission.

**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2023 President's Budget
Education and Training OP-5 Exhibit**

III. Financial Summary (\$ in Thousands):

	FY 2022						
	FY 2021 Actuals	Budget Request	Congressional Action			Current Enacted	FY 2023 Request
			Amount	Percent	Appropriated		
<u>A. BA Subactivities</u>							
1. Uniformed Services University of the Health Sciences	\$184,168	\$177,924	\$5,000	2.81%	\$182,924	\$182,924	\$184,964
2. Other Education and Training	<u>\$126,339</u>	<u>\$155,310</u>	<u>\$2,500</u>	<u>1.61%</u>	<u>\$157,810</u>	<u>\$157,810</u>	<u>\$149,881</u>
Total	<u>\$310,507</u>	<u>\$333,234</u>	<u>\$7,500</u>	<u>2.25%</u>	<u>\$340,734</u>	<u>\$340,734</u>	<u>\$334,845</u>

1. The Defense Health Program reprogrammed the FY 2021 Health Professions Scholarship Program (HPSP) funds (-\$6,000K) to the Departments of the Army, Air Force and Navy in accordance with the transfer of the HPSP to the Service Departments in the FY 2021 President's Budget. HPSP funds were provided for increased scholarships for trauma surgeons.

**Defense Health Program
Operation and Maintenance, Defense-Wide
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Education and Training OP-5 Exhibit**

III. Financial Summary (\$ in Thousands): (Cont.)

<u>B. Reconciliation Summary</u>	<u>Change FY 2022/FY 2022</u>	<u>Change FY 2022/FY 2023</u>
BASELINE FUNDING	\$333,234	\$340,734
Congressional Adjustments (Distributed)	7,500	
Congressional Adjustments (Undistributed)	0	
Adjustments to Meet Congressional Intent	0	
Congressional Adjustments (General Provisions)	0	
SUBTOTAL APPROPRIATED AMOUNT	340,734	
Fact-of-Life Changes (2022 to 2022 Only)	0	
SUBTOTAL BASELINE FUNDING	340,734	
Supplemental	0	
Reprogrammings	0	
Price Changes		10,234
Functional Transfers		-6,854
Program Changes		-9,269
CURRENT ESTIMATE	340,734	334,845
Less: Supplemental	0	
NORMALIZED CURRENT ESTIMATE	\$340,734	\$334,845

**Defense Health Program
 Operation and Maintenance, Defense-Wide
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 Education and Training OP-5 Exhibit**

III. Financial Summary (\$ in Thousands): (Cont.)

FY 2022 President's Budget Request (Amended, if applicable)	\$333,234
1. Congressional Adjustments	\$7,500
a) Distributed Adjustments.....	\$7,500
1) a. Fetal Alcohol Spectrum Disorders Prevention and Clinical Guidelines:	\$5,000
2) b. Specialized Medical Pilot Program:.....	\$2,500
b) Undistributed Adjustments.....	\$0
c) Adjustments to Meet Congressional Intent.....	\$0
d) General Provisions	\$0
FY 2022 Appropriated Amount	\$340,734
2. Supplemental Appropriations	\$0
a) Supplemental Funding.....	\$0
3. Fact-of-Life Changes.....	\$0
a) Functional Transfers.....	\$0
b) Technical Adjustments	\$0
c) Emergent Requirements.....	\$0

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III. Financial Summary (\$ in Thousands): (Cont.)

FY 2022 Baseline Funding	\$340,734
4. Reprogrammings (Requiring 1415 Actions)	\$0
a) Increases	\$0
b) Decreases	\$0
Revised FY 2022 Estimate	\$340,734
5. Less: Item 2, Supplemental Appropriation and Item 4, Reprogrammings	\$0
a) Less: Supplemental Funding	\$0
FY 2022 Normalized Current Estimate	\$340,734
6. Price Change	\$10,234
7. Functional Transfers	\$-6,854
a) Transfers In	\$0
b) Transfers Out.....	\$-6,854
1) Army Defense Health Program FTEs Realigned to the Department of the Army:	\$-6,854
<p>In accordance with the FY 2021 Secretary of Defense Memo, Department of Defense Reform Focus in 2020, the Defense Health Program continues the transfer of Army's Medical Readiness activities which occur outside of the Military Treatment Facilities to the Department of the Army. The Defense Health Agency transfers 66 FTEs and associated funding for education and training readiness functions from the Other Education and Training program element to the Department of the Army.</p>	

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III. Financial Summary (\$ in Thousands): (Cont.)

8. Program Increases	\$5,023
a) Annualization of New FY 2022 Program	\$0
b) One-Time FY 2023 Increases	\$0
c) Program Growth in FY 2023	\$5,023
1) a. Executive Order Minimum Wage Adjustment for Federal Contractors:	\$5,023
Additional funding to address the estimated impacts of Executive Order (E.O.) 14026, Increasing the Minimum Wage for Federal Contractors, dated April 27, 2021. E.O. 14026, Section 4(a) requires the Department of Labor to implement regulations to increase the minimum wage to \$15 per hour by January 30, 2022, on contracts covered by the Fair Labor Standards Act, the Service Contract Act (SCA), or the Davis Bacon Act (DBA). The E.O. also applies only to Federal Contractors and Subcontractors on new contract actions entered into on or after January 30, 2022. In the Education and Training Budget Activity Group, the increase was applied to OP-32 line 989. The FY 2022 Education and Training Budget Activity Group base budget is \$340,734K. The FY 2022 Education and Training baseline contractor staffing is 279 CMEs.	
9. Program Decreases	\$-14,292
a) Annualization of FY 2022 Program Decreases	\$0
b) One-Time FY 2022 Increases	\$-7,500
1) a. Fetal Alcohol Spectrum Disorders Prevention and Clinical Guidelines:	\$-5,000
Adjustment to reverse one-time Fetal Alcohol Spectrum Disorders Prevention and Clinical Guidelines funding increase which was issued to the Uniformed Services University of the Health Sciences' (USUHS) for fetal alcohol spectrum disorder studies. Adjustment decreases other services from non-federal sources funding in the USUHS program element. The FY 2022 Uniform Services University of the Health Sciences program element baseline funding is \$182,924K.	

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III. Financial Summary (\$ in Thousands): (Cont.)

2) b. Specialized Medical Pilot Program: \$-2,500
 Adjustment to reverse one-time Specialized Medical Pilot Program funding increase which was issued to the Defense Health Agency for military orthopedic surgeons advanced arthroscopy skill course. Adjustment decreases other services from non-federal sources funding in the Other Education and Training program element. The FY 2022 Other Education and Training program element baseline funding is \$157,810K.

c) Program Decreases in FY 2023 \$-6,792

1) a. Education and Training Equipment Requirement Reduction: \$-3,920
 Reduces Education and Training equipment requirements following conclusion of simulation equipment purchases in FY 2021 and FY 2022 at the Defense Health Agency's activities. The use of simulation equipment provide meaningful, realistic and effective related training for healthcare providers who lack the experiential knowledge necessary to care for critically-ill patients in a manner that optimizes patient outcomes while minimizing risks to the patient care team. The Defense Health Agency reduced equipment funds from the Other Education and Training program element. The FY 2022 Other Education and Training program element baseline funding is \$157,810K.

2) b. Education and Training Travel Reduction: \$-2,872
 Reduces Education and Training travel requirements at the Defense Health Agency through consolidation of education and training programs. The FY 2022 Education and Training travel baseline funding is \$22,077K.

FY 2023 Budget Request \$334,845

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IV. Performance Criteria and Evaluation Summary:

	(Student Load Count)			Change	Change
	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2021/2022</u>	<u>FY 2022/2023</u>
	<u>Actuals</u>	<u>Estimate</u>	<u>Estimate</u>		
Officer Acquisition¹	692	697	697	5	0
Graduate Medical Education (GME)²	3,943	4,027	4,046	84	19
Medical Education and Training Campus (METC)³	3,691	8,983	9,053	5,292	70
Other Training⁴	2,647	2,647	2,647	0	0

1. Officer Acquisition programs represent the Uniformed Services University of the Health Sciences Medical Students. Values represent student load for a year.

2. Graduate Medical Education includes initial and advanced skills training programs, and leadership programs for officer and enlisted personnel. Values represent student load for a year.

3. Medical Education and Training Campus: The student loads illustrated reflect annual workload projections based upon actual Defense Health Agency and Uniformed Services University of the Health Sciences (USUHS) requirement training programs and courses. Medical Education and Training Campus (METC) include enlisted training programs for Army (MOS), Navy (NEC), and Air Force (AFSC) requirements, as well as Public Health, Nuclear Medicine, Medical Laboratory Technicians, Surgery Technicians, Preventive Medicine, Pharmacy Technicians, Dental Assistants, and Combat Medic. These are centrally managed within Army Training Resource Requirement System (ATRRS). Warrior Care Training and Soft Skills Training are components of the METC training curriculum (Warrior Task - Field Task Battle Drills). Increase in FY 2022 is attributed to the increase in the number of College of Applied Health Sciences students at USUHS.

4. Other Training student loads illustrated reflect the average daily student numbers based upon actual Defense Health Agency requirement training programs and courses. Other Training includes courses offered at the Continuing Education Program Office (CEPO); Joint Medical Executive Skills Institute (JMESI); Military Treatment Facility (MTF OPS) - Medical Treatment Network (MTN), leadership and skills progression courses as well as service specific professional development training. Values represent student load for a year.

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V. Personnel Summary:

	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Change FY 2021/ FY 2022</u>	<u>Change FY 2022/ FY 2023</u>
Active Military End Strength (E/S) (Total)	13,330	14,254	11,287	924	-2,967
Officer	7,132	7,273	5,702	141	-1,571
Enlisted	6,198	6,981	5,585	783	-1,396
Active Military Average Strength (A/S) (Total)	13,986	13,793	12,771	-193	-1,022
Officer	7,289	7,203	6,488	-86	-715
Enlisted	6,697	6,590	6,283	-107	-307
Civilian FTEs (Total)	1,156	1,155	1,162	-1	7
U.S. Direct Hire	1,113	1,112	1,119	-1	7
Foreign National Direct Hire	1	1	1	0	0
Total Direct Hire	1,114	1,113	1,120	-1	7
Foreign National Indirect Hire	1	1	1	0	0
Reimbursable Civilians	41	41	41	0	0
Average Annual Civilian Salary (\$ in thousands)	138.1	132.5	138.5	-5.7	6.1
Contractor FTEs (Total)	271	279	217	8	-62

Personnel Summary Explanations:

Explanation of Changes in Active Military End Strength: The net increase from FY 2021 to FY 2022 (+924) reflects execution adjustments (+1,260: Air Force +428; Army +507; Navy +325) and includes the technical adjustment made by the military departments for the revised drawdown reductions (-336: Army: +2; Air Force: -57; Navy -281) to comply with Section 719 of the FY 2020 National Defense Authorization Act (NDAA) that limits the realignment or reduction of military medical E/S authorizations and to reflect executable Service plans for the drawdown. The net decrease from FY 2022 to FY 2023 (-2,967) includes technical adjustment made by the military departments for the revised drawdown reductions to comply with Section 719 of the FY 2020 National Defense Authorization Act (NDAA) accounts for (-45), and reductions by Component as follows: Army (-2,281): transfer of the following programs to the Department of the Army: 1) Army readiness functions (-1,235); 2) In-Military Treatment Facility Army Readiness Programs (-6); as well as transfers the U.S. Transportation (TRANSCOM) Surgeon General Office (-1); reductions to establish Student RICS (-1,038); and internal realignment of the Military Training Network (MTN) program to DHA (-1). Navy (-

**Defense Health Program
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V. Personnel Summary: (Cont.)

14): transfer of the following programs to the Department of the Navy: 1) Military Sealift Command (-2); and 2) Research and Development Lab (-2); as well as and internal realignment of the Military Training Network (MTN) program to DHA (-2); and Navy BUMED internal realignments to other BAGs (-8). Air Force (-627): transfer non-military treatment facilities resources to the Department of the Air Force (-622) as well as and internal realignment of the Military Training Network (MTN) program to DHA (-5).

Explanation of changes in Civilian FTEs: The net decrease from FY 2021 to FY 2022 (-1) reflects the adjustment to USUHS' FTEs to match program execution (+31), a Defense Health Agency internal realignment (-1) for the Safety and Occupational Health Program and FY 2021 execution adjustments (-31: DHA-Comptroller +46, Navy -28, Army -25, DCFM -12, and Air Force -12) based on FY 2021 actual FTE execution. The net increase FY 2022 to FY 2023 (+7) reflects the following changes by component: Army (-13): Transfer of the Education and Training readiness programs to the Department of the Army (-66) and internal realignment from other BAGs (+53). Navy (-11): internal realignment to other BAGs (-11). Air Force: internal realignment from other BAGs (+31).

Explanation of changes in Contractor FTEs: The increase from FY 2021 to FY 2022 (+8) is accounted for in the Other Education and Training program element (+8) and is attributed to actual execution within the Education and Training programs at the Defense Health Agency. The decrease from FY 2022 to FY 2023 (-62) reflects downward adjustments to the contract resources in the Other Education and Training program element (-62) for ongoing consolidation of services at the Defense Health Agency in accordance with the FY 2017 National Defense Authorization Act Section 702.

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Education and Training OP-5 Exhibit**

VI. OP 32 Line Items as Applicable (Dollars in thousands):

	FY 2021 <u>Program</u>	<u>Change from FY 2021 to FY 2022</u>		FY 2022 <u>Program</u>	<u>Change from FY 2022 to FY 2023</u>		FY 2023 <u>Program</u>
		<u>Price Growth</u>	<u>Program Growth</u>		<u>Price Growth</u>	<u>Program Growth</u>	
101 EXEC, GEN'L & SPEC SCHEDS	150,544	3,417	-10,374	143,587	5,923	3,526	153,036
103 WAGE BOARD	3,403	77	438	3,918	162	-1,899	2,181
104 FN DIRECT HIRE (FNDH)	62	1		63	3	-1	65
0199 TOTAL CIVILIAN PERSONNEL COMPENSATION	154,009	3,495	-9,936	147,568	6,088	1,626	155,282
308 TRAVEL OF PERSONS	13,288	399	8,390	22,077	464	-5,279	17,262
0399 TOTAL TRAVEL	13,288	399	8,390	22,077	464	-5,279	17,262
401 DLA ENERGY (FUEL PRODUCTS)	3	0	19	22	-2	2	22
412 NAVY MANAGED SUPPLY, MATL	1,059	88	167	1,314	78	-44	1,348
414 AIR FORCE CONSOL SUST AG (SUPPLY)	0	0	3	3	0		3
416 GSA SUPPLIES & MATERIALS	0	0	1,090	1,090	23	18	1,131
417 LOCAL PURCH SUPPLIES & MAT	0	0	457	457	10	4	471
422 DLA MAT SUPPLY CHAIN (MEDICAL)	0	0	32	32	0	1	33
0499 TOTAL DEFENSE WORKING CAPITAL FUND SUPPLIES AND MATERIALS	1,062	88	1,768	2,918	109	-19	3,008
503 NAVY FUND EQUIPMENT	0	0	496	496	0	19	515
506 DLA MAT SUPPLY CHAIN (CONST & EQUIP)	0	0	474	474	3	10	487
507 GSA MANAGED EQUIPMENT	0	0	566	566	12	3	581
0599 TOTAL DEFENSE WORKING CAPITAL FUND EQUIPMENT PURCHASES	0	0	1,536	1,536	15	32	1,583
614 SPACE & NAVAL WARFARE CENTER	804	4	90	898	25		923
671 DISA DISN SUBSCRIPTION SERVICES (DSS)	44	3	15	62	2	-1	63
0699 TOTAL OTHER FUND PURCHASES	848	7	105	960	27	-1	986
707 AMC TRAINING	741	4	-745	0	0	0	0
771 COMMERCIAL TRANSPORT	335	10	127	472	0	9	481
0799 TOTAL TRANSPORTATION	1,076	14	-618	472	0	9	481

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VI. OP 32 Line Items as Applicable (Dollars in thousands):

	FY 2021 Program	Change from FY 2021 to FY 2022		FY 2022 Program	Change from FY 2022 to FY 2023		FY 2023 Program
		Price Growth	Program Growth		Price Growth	Program Growth	
901 FOREIGN NATIONAL INDIRECT HIRE (FNIH)	1	0	3	4	0		4
914 PURCHASED COMMUNICATIONS (NON-FUND)	66	2	240	308	6		314
915 RENTS (NON-GSA)	287	9	446	742	16	-3	755
917 POSTAL SERVICES (U.S.P.S)	0	0	17	17	0		17
920 SUPPLIES & MATERIALS (NON-FUND)	20,262	608	8,039	28,909	607	-8,488	21,028
921 PRINTING & REPRODUCTION	922	28	-104	846	18	-43	821
922 EQUIPMENT MAINTENANCE BY CONTRACT	2,508	75	-387	2,196	46	65	2,307
923 FACILITIES SUST, REST, & MOD BY CONTRACT	82	2	-84	0	0	9	9
925 EQUIPMENT PURCHASES (NON-FUND)	17,992	540	6,833	25,365	533	-3,920	21,978
932 MGT PROF SUPPORT SVCS	8,836	265	-7,512	1,589	33	-18	1,604
934 ENGINEERING & TECH SVCS	514	15	-529	0	0	0	0
936 TRAINING AND LEADERSHIP DEVELOPMENT (OTHER CONTRACTS)	1,909	57	-1,966	0	0	0	0
960 OTHER COSTS (INTEREST AND DIVIDENDS)	2,200	0	-2,200	0	0	216	216
964 OTHER COSTS (SUBSISTENCE AND SUPPORT OF PERSONS)	0	0	541	541	11	-1	551
986 MEDICAL CARE CONTRACTS	5,697	234	-2,664	3,267	131	-164	3,234
987 OTHER INTRA-GOVT PURCH	9,900	297	5,277	15,474	325	1,179	16,978
988 GRANTS	32,088	963	-2,734	30,317	637	1,413	32,367
989 OTHER SERVICES	33,745	1,012	18,720	53,477	1,123	-2,634	51,966
990 IT CONTRACT SUPPORT SERVICES	3,215	96	-1,160	2,151	45	-102	2,094
0999 TOTAL OTHER PURCHASES	140,224	4,203	20,776	165,203	3,531	-12,491	156,243
9999 GRAND TOTAL	310,507	8,206	22,021	340,734	10,234	-16,123	334,845

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Base Operations/Communications OP-5 Exhibit**

I. Description of Operations Financed:

Base Operations (BASOPS)/Communications refers to the resources for activities associated with all aspects of operating and maintaining facilities within the Military Health System (MHS). BASOPS provides for basic municipal services to operate our facilities, services for pest control, custodial, refuse collection, landscaping, security, internal and external communications, administrative services and routine repair, maintenance or modernization activities at locations world-wide supporting the Armed Forces. The program consists of the following program elements:

Facility Restoration and Modernization - Resources required for facilities' restoration and modernization projects including repair and replacement due to excessive age, natural disaster, fire, accident, or other causes. Modernization includes alteration of facilities solely to implement new or higher standards (including regulatory changes), to accommodate new functions, or to replace building components that typically last more than 30 years (such as foundations and framework). Recapitalization of facilities, which extends the service life of a facility, is accomplished by either restoration, modernization or replacement of the facility keeping infrastructure inventory relevant to delivery of healthcare advances and enhance operational or business effectiveness within a revitalized structure. The Operations & Maintenance portion of recapitalization is restoration or modernization activities.

Facility Sustainment - Resources required for maintenance and repair activities necessary to keep facilities in good working order. It includes regularly scheduled adjustments and inspections, preventive maintenance tasks, emergency response and service calls for minor repairs. Sustainment also includes major repairs or replacement of facility components (usually accomplished by contract) that are expected to occur periodically throughout the life cycle of facilities. This work includes regular roof replacement, refinishing of wall surfaces, repairing and replacement of heating and cooling systems, and replacing tile and carpeting.

Facilities Operations- Resources required for fire prevention and protection including crash rescue, emergency response, and disaster preparedness, engineering readiness, utilities to include plant operation and purchase of heat, light and power, electricity, water, natural gas, other utility services, refuse collection and disposal to include recycling operations, pavement clearance including snow and ice removal from roads, lease costs for real property including off-base facilities, grounds maintenance and landscaping, real property management and engineering services including special inspections of facilities and master planning, pest control, and custodial services.

Base Communications - Resources required to provide base communication voice or data and wireless services to Military Health System medical activities. This includes non-tactical, non-DCS (Defense Communications System), base communication facilities and equipment systems that provide local voice, data or wireless communications worldwide. Services such as telephone service, telegraph service, marine cable service, postage and box rentals, contractual mail service including express letter delivery, or messenger service. Includes all rental payments for equipment to accomplish communication services. (excludes parcel post and express mail services for freight and IT or telecom hardware, software and related training).

Base Operations Support - Resources required to provide comptroller services, data processing services, information activities, legal activities, civilian personnel administration, military personnel administration, printing and reproduction, facility safety, management analysis/engineering services, retail supply operations, supply activities, procurement operations, storage activities, transportation activities, physical security and police activities, non-aseptic laundry and dry cleaning, food services, and morale, welfare and recreation activities.

Environmental Compliance & Pollution Prevention - Resources required to comply with environmental laws, regulations, criteria, and any action that is

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I. Description of Operations Financed: (Cont.)

designed to reduce or eliminate (rather than control or treat) the future impact that an operation may have on the environment (including impacts to the air, surface and ground waters, vegetation and soils) through the source reduction of pollutants, more efficient use of natural resources, recycling, and/or reduced emissions of toxic and other undesirable materials or wastes to the environment. This includes manpower, training, travel, and supplies.

Visual Information Systems - Resources required to provide manpower, travel, contractual service, procurement of supplies and materials, expense equipment, necessary facilities and the associated services specifically identifiable to visual information productions, services, and support.

II. Force Structure Summary:

The Base Operations and Communications Budget Activity Group (BAG) includes staffing and contracts to provide base operations support services to the Military Health System facilities, planning and oversight of medical infrastructure, and facility systems maintenance to include life support systems. Infrastructure alterations are necessary to keep up with modern medical practices, promote efficiencies and recapitalize facility inventory to accomplish the medical healthcare mission. This BAG primarily awards contracts to achieve these specialized infrastructure changes. In addition to infrastructure and system operations, this BAG also includes essential base support activities such as environmental waste removal, non-medical custodial service, grounds and surface maintenance including mowing, landscaping, road maintenance and snow removal, security and guard service and base communication systems. Many of the activities and services received consist of cost effective contracts to assure timely repair and service availability to sustain continuous services within the medical facility. The funds in this BAG enable the DHP medical facilities to comply with The Joint Commission and other accrediting bodies standards for accreditation and certification of health care organizations.

NOTE: Distribution of funds between CONUS and OCONUS follows the Financial Management Regulation (FMR) definition of CONUS and OCONUS. DoD 7000.14.R "Contiguous United States [CONUS] is the 48 states of the United States and the District of Columbia, which do not include Alaska and Hawaii." See 37 United States Code (U.S.C.) §101." Non-Foreign OCONUS Area is the states of Alaska and Hawaii, the Commonwealths of Puerto Rico and the Northern Mariana Islands; Guam; the U.S. Virgin Islands, and U.S. territories, and possessions (excluding the former Trust Territories of the Pacific Islands, which are foreign areas for Joint Travel Regulations purposes).

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III. Financial Summary (\$ in Thousands):

	FY 2022						
	FY 2021	Budget	Congressional Action			Current	FY 2023
			Amount	Percent	Appropriated		
<u>A. BA Subactivities</u>	<u>Actuals</u>	<u>Request</u>				<u>Enacted</u>	<u>Request</u>
1. Facility Restoration/Modernization - CONUS	\$159,424	\$279,253	\$78,000	27.93%	\$357,253	\$357,253	\$323,999
2. Facility Restoration/Modernization - OCONUS	\$106,853	\$96,175	\$0	0.00%	\$96,175	\$96,175	\$98,936
3. Facility Sustainment - CONUS	\$262,774	\$460,751	\$-11,068	-2.40%	\$449,683	\$449,683	\$499,218
4. Facility Sustainment - OCONUS	\$408,549	\$140,903	\$0	0.00%	\$140,903	\$140,903	\$159,649
5. Facilities Operations - Health Care (CONUS)	\$447,564	\$475,676	\$0	0.00%	\$475,676	\$475,676	\$502,915
6. Facilities Operations - Health Care (OCONUS)	\$50,608	\$56,067	\$0	0.00%	\$56,067	\$56,067	\$59,431
7. Base Communications - CONUS	\$40,960	\$50,696	\$0	0.00%	\$50,696	\$50,696	\$49,814
8. Base Communications - OCONUS	\$2,213	\$3,198	\$0	0.00%	\$3,198	\$3,198	\$2,257
9. Base Operations - CONUS	\$269,811	\$313,864	\$5,000	1.59%	\$318,864	\$318,864	\$364,768
10. Base Operations - OCONUS	\$7,677	\$24,183	\$0	0.00%	\$24,183	\$24,183	\$24,620
11. Pollution Prevention	\$9	\$298	\$0	0.00%	\$298	\$298	\$304
12. Environmental Compliance	\$13,837	\$18,078	\$0	0.00%	\$18,078	\$18,078	\$18,316
13. Visual Information Systems	<u>\$6,039</u>	<u>\$7,723</u>	<u>\$0</u>	<u>0.00%</u>	<u>\$7,723</u>	<u>\$7,723</u>	<u>\$7,331</u>
Total	\$1,776,318	\$1,926,865	\$71,932	3.73%	\$1,998,797	\$1,998,797	\$2,111,558

1. FY 2021 Restoration and Modernization actuals includes one-time increase of \$31,300K for Natural Disaster Recovery.
2. FY 2021 Congressional Adjustment includes \$10,000K for Fisher House funds provided in Section 8068 of the FY 2021 Consolidated Appropriations Act.
3. FY 2021 actuals includes -\$155,892K reprogrammed from Base Operations for COVID-19 requirements.
4. FY 2022 Congressional Adjustment includes \$5,000K for Fisher House funds provided in Section 8069 of the FY 2022 Consolidated Appropriations Act.

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III. Financial Summary (\$ in Thousands): (Cont.)

<u>B. Reconciliation Summary</u>	<u>Change</u>	<u>Change</u>
BASELINE FUNDING	<u>FY 2022/FY 2022</u>	<u>FY 2022/FY 2023</u>
	\$1,926,865	\$1,998,797
Congressional Adjustments (Distributed)	66,932	
Congressional Adjustments (Undistributed)	0	
Adjustments to Meet Congressional Intent	0	
Congressional Adjustments (General Provisions)	5,000	
SUBTOTAL APPROPRIATED AMOUNT	1,998,797	
Fact-of-Life Changes (2022 to 2022 Only)	0	
SUBTOTAL BASELINE FUNDING	1,998,797	
Supplemental	0	
Reprogrammings	0	
Price Changes		45,439
Functional Transfers		101,011
Program Changes		-33,689
CURRENT ESTIMATE	1,998,797	2,111,558
Less: Supplemental	0	
NORMALIZED CURRENT ESTIMATE	\$1,998,797	\$2,111,558

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III. Financial Summary (\$ in Thousands): (Cont.)

FY 2022 President's Budget Request (Amended, if applicable)	\$1,926,865
1. Congressional Adjustments	\$71,932
a) Distributed Adjustments.....	\$66,932
1) a. Facilities, Sustainment, Restoration, and Modernization:	\$78,000
2) b. Excess Equipment - Facilities, Sustainment, Restoration, and Modernization:	\$-11,068
b) Undistributed Adjustments.....	\$0
c) Adjustments to Meet Congressional Intent.....	\$0
d) General Provisions	\$5,000
1) a. Section 8068: Provision for Fisher House Funding.....	\$5,000
FY 2022 Appropriated Amount	\$1,998,797
2. Supplemental Appropriations	\$0
a) Supplemental Funding.....	\$0
3. Fact-of-Life Changes.....	\$0
a) Functional Transfers.....	\$0
b) Technical Adjustments	\$0

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III. Financial Summary (\$ in Thousands): (Cont.)

c) Emergent Requirements.....	\$0
FY 2022 Baseline Funding.....	\$1,998,797
4. Reprogrammings (Requiring 1415 Actions).....	\$0
a) Increases	\$0
b) Decreases	\$0
Revised FY 2022 Estimate.....	\$1,998,797
5. Less: Item 2, Supplemental Appropriation and Item 4, Reprogrammings	\$0
a) Less: Supplemental Funding.....	\$0
FY 2022 Normalized Current Estimate	\$1,998,797
6. Price Change	\$45,439
7. Functional Transfers	\$101,011
a) Transfers In	\$102,112
1) a. Army Medical Research, Development and Acquisition Capabilities:.....	\$75,007
In accordance with Section 711 of the National Defense Authorization Act of FY 2019 and section 737 of the National Defense Authorization Act of 2020, the Department of the Army transfers associated programmatic resources to Defense Health Agency for Base Operations (+\$27,955), Facilities, Restoration, and Modernization (+12,999K), and Facilities Sustainment (+34,053K) associated with Army Medical Research, Development, and Acquisition Capabilities. This transfer provides resources for support to the Institute of Surgical Research (ISR), Research Institute of Chemical Defense (RICD),	

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III. Financial Summary (\$ in Thousands): (Cont.)

Medical Research Institute of Infectious Diseases (MRIID), Walther Reed Army Institute of Research (WRAIR), Medical Research Acquisition Activity (MRAA), and associated activities.

2) b. Veterinary Treatment Facilities Sustainment, Restoration, and Modernization Funds:\$16,563
Transfer funding to Facilities Restoration and Modernization (\$5,580K) and Facilities Sustainment (\$10,983K) from Department of the Army for the restoration and modernization project requirements for Veterinary Treatment Facilities (VTF) that support Public Health and Veterinary Services. Funds will also provide for the increased maintenance, repairs, and sustainment requirements of VTFs.

3) c. Financial Improvement and Audit Readiness:\$10,430
Funds the request from the Under Secretary of Defense (Comptroller) (USD(C)) to transfer audits funds for Base Operations (+\$10,430) to the Defense Health Agency (DHA) to properly align the funding with the requirement to hire Independent Public Accounts (IPAs) for the standalone financial statement audits conducted by DHA.

4) d. Civilian FTE for Deployment Health:\$112
Transfer funding to Base Communications (\$112K) from Department of the Army for communications that support the Deployment Health function.

b) Transfers Out..... \$-1,101

1) a. Medical Readiness - Transfer to the Military Departments: \$-1,101
In accordance with the FY 2021 Secretary of Defense Memo, Department of Defense Reform Focus in 2020, the Defense Health Program transfers the Service's Medical Readiness activities which occur outside of the Military Treatment Facilities to the Military Departments. This transfer allows the medical force structure to meet the operational requirements in support of the National Defense Strategy and support the Congressionally-mandated reforms to the Military Health System. The following Base Operations/Communications Medical Readiness programs have been identified as functions that would be more effectively and efficiently run by the Military Departments: Plans, Training, Mobilization and Security, Office of Soldier Counsel, and Commander's Support staff (Troop Command) (-\$128K; -1 FTE) to Department of the Army for Planning, Programming, Budgeting and Execution support. U.S. Army Training and Doctrine Command (TRADOC), U.S. Army Materiel Command (AMC), and the U.S. Army Health Facility Planning Agency (HFPA) (-\$973K; -8 FTEs) to the Department of the Army for Food Protection/Animal Health, Pre-Hospital Emergency Medical Services (PHEMS), Optical Fabrication and Out-Service Training (OST)/Initial Entry Training Processing functions.

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III. Financial Summary (\$ in Thousands): (Cont.)

8. Program Increases	\$44,311
a) Annualization of New FY 2022 Program	\$0
b) One-Time FY 2023 Increases	\$0
c) Program Growth in FY 2023	\$44,311
1) a. Facilities Restoration and Modernization:	\$28,648
Funds provided for restoration and modernization (RM) project requirements that improve the facility condition index for the Military Health Systems to promote safe, reliable, high quality health care and comply with accreditation standards mandated by The Joint Commission and other accrediting bodies. Restoration includes repairs due to damage by nature events and equipment failing due to insufficient maintenance or early failure. FY 2017 National Defense Authorization Act included transfer of funding for Medical Research and Public Health. The FY 2022 Restoration and Modernization baseline budget is \$453,428K.	
2) b. Executive Order Minimum Wage Adjustment for Federal Contractors:	\$12,502
Additional funding to address the estimated impacts of Executive Order (E.O.) 14026, Increasing the Minimum Wage for Federal Contractors, dated April 27, 2021. E.O. 14026, Section 4(a) requires the Department of Labor to implement regulations to increase the minimum wage to \$15 per hour by January 30, 2022, on contracts covered by the Fair Labor Standards Act, the Service Contract Act (SCA), or the Davis Bacon Act (DBA). The E.O. also applies only to Federal Contractors and Subcontractors on new contract actions entered into on or after January 30, 2022. The FY 2022 Base Operations/Communications (BASOPS) baseline budget is \$1,998,797K. The FY 2022 Base Operations/Communications (BASOPS) baseline contractor staffing is 536 CMEs.	
3) c. Increased Contract Requirements at the Defense Health Agency:.....	\$3,161
Increased funding at the Defense Health Agency for Facilities Operation contract requirements. Provides funds to necessary facilities, contract, and associated costs to plan, manage and execute lease, utility, refuse collection and disposal, prevention and protection, and real property management functions. The increases are due to additional facilities and other increases seen due to inflation and increased host installation costs (i.e., utilities). The FY 2022 Facilities Operation baseline budget is \$531,743K. The FY 2022 Facilities Operation baseline contractor staffing is 85 CMEs.	
9. Program Decreases	\$-78,000

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III. Financial Summary (\$ in Thousands): (Cont.)

a) Annualization of FY 2022 Program Decreases	\$0
b) One-Time FY 2022 Increases	\$-78,000
1) a. Facilities, Sustainment, Restoration and Modernization:	\$-78,000
Reduction for one-time Congressional add to fund additional Facility Restoration and Modernization projects for FY 2022. The FY 2022 Restoration and Modernization baseline budget is \$453,428K.	
c) Program Decreases in FY 2023	\$0
FY 2023 Budget Request	\$2,111,558

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IV. Performance Criteria and Evaluation Summary:

Facility Sustainment Model

	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Change FY 2021/2022</u>	<u>Change FY 2022/2023</u>
Facility Sustainment Funding:	671,323	590,586	658,867	-80,737	68,281
Facility Sustainment Model Requirement:	655,877	674,839	733,608	18,962	58,769
Sustainment Rate (MILPERS not included):	102%	88%	90%		

Program	Category	Program Value
Direct Care Medical Healthcare Delivery Mission	Category I FAC Code Series = 5 unless noted below	100%
Medical Labs	Category I FAC Code Series = 5302, 3101 & 3102	85%
All other	Categories II, III Not critical to medical or instruction classrooms	85%
Remaining (Utility plants, USUHS, etc.)	Category I	100%

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V. Personnel Summary:

	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Change FY 2021/ FY 2022</u>	<u>Change FY 2022/ FY 2023</u>
Active Military End Strength (E/S) (Total)	1,048	1,048	734	0	-314
Officer	250	319	189	69	-130
Enlisted	798	729	545	-69	-184
Active Military Average Strength (A/S) (Total)	1,170	1,049	891	-121	-158
Officer	281	285	254	4	-31
Enlisted	889	764	637	-125	-127
Civilian FTEs (Total)	1,079	2,086	1,967	1,007	-119
U.S. Direct Hire	1,002	1,923	1,764	921	-159
Foreign National Direct Hire	35	60	101	25	41
Total Direct Hire	1,037	1,983	1,865	946	-118
Foreign National Indirect Hire	39	100	99	61	-1
Reimbursable Civilians	3	3	3	0	0
Average Annual Civilian Salary (\$ in thousands)	115.2	108.2	103.8	-7.1	-4.4
Contractor FTEs (Total)	919	536	528	-383	-8

Personnel Summary Explanations:

Explanation of changes in Active Military End Strength: The net change from FY 2021 to FY 2022 (0) reflects execution adjustments (+149: Air Force +9, Army +1, and Navy +139) and includes the technical adjustment made by the military departments for the revised drawdown reductions (Navy -149) to comply with Section 719 of the FY 2020 National Defense Authorization Act (NDAA) that limits the realignment or reduction of military medical end strength authorizations and to reflect executable Service plans for the drawdown. The net decrease from FY 2022 to FY 2023 (-314) includes the internal realignment of Navy Medical military personnel to In-house Care (-191), transfer of military personnel due to Defense Wide Review (Army -1), transfer to Navy medical for Medical Sealift Command (Navy -31), transfer of non-MTF resources (Air Force -7) the transfer of Research and Development Lab (Navy -4), technical correction to align memo (Agency) controls with direct (Service) controls in the CAPE system (Army +3), and includes the technical adjustment made by the military departments for the revised

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V. Personnel Summary: (Cont.)

drawdown reductions (Navy -82 and Army -1) to comply with Section 719 of the FY 2020 National Defense Authorization Act (NDAA) that limits the realignment or reduction of military medical end-strength authorizations and to reflect executable Service plans for the drawdown.

Explanation of changes in Civilian FTEs: The net increase from FY 2021 to FY 2022 (+1,007) reflects execution adjustments (DHA-Comptroller -34, DCFM +31, Navy +849, Air Force +6, and Army +155); The change from FY 2022 to FY 2023 (-119) reflects the transfer of civilian FTEs to the Department of the Army for medical readiness due to the Defense Wide Review (-9); transfer (FTE only) to Consolidated Health Support for Army Public Health Center (-1), transfer of civilians from the Army for Army Medical Research, Development and Acquisition Capabilities (+45), realignment of identified IT support FTEs assigned to each MTF (-13), and internal realignment to other BAGs (-141: Army -24, Navy -91, and Air Force -26).

Explanation of changes in Contractor FTEs: The decrease from FY 2021 to FY 2022 (-383) reflects ongoing consolidation of services at the Defense Health Agency in accordance with the FY 2017 National Defense Authorization Act Section 702. The decrease from FY 2022 to FY 2023 (-8) reflects ongoing consolidation of services at the DHA in accordance with the FY 2017 NDAA Section 702.

**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2023 President's Budget
Base Operations/Communications OP-5 Exhibit**

VI. OP 32 Line Items as Applicable (Dollars in thousands):

	FY 2021 <u>Program</u>	<u>Change from FY 2021 to FY 2022</u>		FY 2022 <u>Program</u>	<u>Change from FY 2022 to FY 2023</u>		FY 2023 <u>Program</u>
		<u>Price Growth</u>	<u>Program Growth</u>		<u>Price Growth</u>	<u>Program Growth</u>	
101 EXEC, GEN'L & SPEC SCHEDS	93,389	2,120	93,949	189,458	7,815	-29,262	168,011
103 WAGE BOARD	27,649	628	1,774	30,051	1,240	-1,846	29,445
104 FN DIRECT HIRE (FNDH)	1,616	37	1,993	3,646	150	161	3,957
105 SEPARATION LIABILITY (FNDH)	3	0	42	45	2	-47	0
106 BENEFIT TO FMR EMPLOYEES	0	0	1	1	0		1
107 VOLUNTARY SEP INCENTIVES	48	1	-9	40	2	-2	40
0199 TOTAL CIVILIAN PERSONNEL COMPENSATION	122,705	2,786	97,750	223,241	9,209	-30,996	201,454
308 TRAVEL OF PERSONS	1,118	34	10,150	11,302	237	-2,753	8,786
0399 TOTAL TRAVEL	1,118	34	10,150	11,302	237	-2,753	8,786
401 DLA ENERGY (FUEL PRODUCTS)	2,817	285	-320	2,782	-208	-565	2,009
402 SERVICE FUND FUEL	0	0	79	79	0	-12	67
412 NAVY MANAGED SUPPLY, MATL	0	0	184	184	11	-86	109
416 GSA SUPPLIES & MATERIALS	0	0	292	292	6	-133	165
417 LOCAL PURCH SUPPLIES & MAT	0	0	1,914	1,914	40	-853	1,101
422 DLA MAT SUPPLY CHAIN (MEDICAL)	0	0	240	240	2	-102	140
0499 TOTAL DEFENSE WORKING CAPITAL FUND SUPPLIES AND MATERIALS	2,817	285	2,389	5,491	-149	-1,751	3,591
503 NAVY FUND EQUIPMENT	0	0	173	173	0	-113	60
507 GSA MANAGED EQUIPMENT	0	0	207	207	4	-137	74
0599 TOTAL DEFENSE WORKING CAPITAL FUND EQUIPMENT PURCHASES	0	0	380	380	4	-250	134
631 NAVY BASE SUPPORT (NFESC)	345	14	44,331	44,690	-193	-7,697	36,800
647 DISA ENTERPRISE COMPUTING CENTERS	0	0	325	325	7	-332	0
671 DISA DISN SUBSCRIPTION SERVICES (DSS)	1,121	86	884	2,091	67	-80	2,078
679 COST REIMBURSABLE PURCHASE	0	0	1,101	1,101	0	-692	409
680 BUILDING MAINT FUND PURCH	46,130	461	-3,296	43,295	598	268	44,161

**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2023 President's Budget
Base Operations/Communications OP-5 Exhibit**

VI. OP 32 Line Items as Applicable (Dollars in thousands):

	FY 2021 Program	Change from FY 2021 to FY 2022		FY 2022 Program	Change from FY 2022 to FY 2023		FY 2023 Program
		Price Growth	Program Growth		Price Growth	Program Growth	
691 DFAS FINANCIAL OPERATIONS (ARMY)	14,795	-420	2,333	16,708	598	-259	17,047
692 DFAS FINANCIAL OPERATIONS (NAVY)	17,374	-1,229	-8,387	7,758	258	-1,128	6,888
693 DFAS FINANCIAL OPERATIONS (AIR FORCE)	0	0	3,366	3,366	278	-211	3,433
696 DFAS FINANCIAL OPERATION (OTHER DEFENSE AGENCIES)	21,216	2,202	-13,478	9,940	544	-2,696	7,788
0699 TOTAL OTHER FUND PURCHASES	100,981	1,114	27,179	129,274	2,157	-12,827	118,604
706 AMC CHANNEL PASSENGER	2	0	-2	0	0	0	0
707 AMC TRAINING	64	0	-64	0	0	0	0
719 SDDC CARGO OPS-PORT HNDLG	0	0	1,198	1,198	-139	40	1,099
771 COMMERCIAL TRANSPORT	615	18	930	1,563	0	31	1,594
0799 TOTAL TRANSPORTATION	681	18	2,062	2,761	-139	71	2,693
901 FOREIGN NATIONAL INDIRECT HIRE (FNIH)	1,295	29	737	2,061	43	252	2,356
912 RENTAL PAYMENTS TO GSA (SLUC)	10,410	312	11,652	22,374	470	75	22,919
913 PURCHASED UTILITIES (NON-FUND)	168,525	5,056	88,816	262,397	5,510	12,459	280,366
914 PURCHASED COMMUNICATIONS (NON-FUND)	21,925	658	19,784	42,367	890	-214	43,043
915 RENTS (NON-GSA)	64,009	1,920	-42,883	23,046	484	-692	22,838
917 POSTAL SERVICES (U.S.P.S)	207	6	1,972	2,185	46	-3	2,228
920 SUPPLIES & MATERIALS (NON-FUND)	4,741	142	23,838	28,721	603	2,325	31,649
921 PRINTING & REPRODUCTION	1,509	45	2,547	4,101	86	-2,004	2,183
922 EQUIPMENT MAINTENANCE BY CONTRACT	2,705	81	6,082	8,868	186	-215	8,839
923 FACILITIES SUST, REST, & MOD BY CONTRACT	421,830	12,655	-52,173	382,312	8,029	71,629	461,970
925 EQUIPMENT PURCHASES (NON-FUND)	3,923	118	44,270	48,311	1,015	0	49,326
930 OTHER DEPOT MAINTENANCE (NON-FUND)	1	0	356	357	7	-7	357
932 MGT PROF SUPPORT SVCS	115,759	3,473	-101,808	17,424	366	9,954	27,744
933 STUDIES, ANALYSIS & EVAL	11,174	335	-11,401	108	2	-2	108
934 ENGINEERING & TECH SVCS	1	0	1,401	1,402	29	-59	1,372
937 LOCALLY PURCHASED FUEL (NON-FUND)	0	0	1,912	1,912	-143	154	1,923
955 OTHER COSTS (MEDICAL CARE)	17,674	725	-11,171	7,228	289	1,292	8,809

**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2023 President's Budget
Base Operations/Communications OP-5 Exhibit**

VI. OP 32 Line Items as Applicable (Dollars in thousands):

	FY 2021 <u>Program</u>	<u>Change from FY 2021 to FY 2022</u>		FY 2022 <u>Program</u>	<u>Change from FY 2022 to FY 2023</u>		FY 2023 <u>Program</u>
		<u>Price Growth</u>	<u>Program Growth</u>		<u>Price Growth</u>	<u>Program Growth</u>	
957 OTHER COSTS (LAND AND STRUCTURES)	264,852	7,946	181,425	454,223	9,539	-42,183	421,579
960 OTHER COSTS (INTEREST AND DIVIDENDS)	15,403	0	-15,403	0	0	347	347
986 MEDICAL CARE CONTRACTS	8,372	343	-8,032	683	27	594	1,304
987 OTHER INTRA-GOVT PURCH	134,614	4,038	23,333	161,985	3,402	26,581	191,968
988 GRANTS	0	0	5,000	5,000	105	-5,105	0
989 OTHER SERVICES	265,428	7,963	-152,590	120,801	2,537	40,162	163,500
990 IT CONTRACT SUPPORT SERVICES	13,659	410	14,413	28,482	598	488	29,568
0999 TOTAL OTHER PURCHASES	1,548,016	46,255	32,077	1,626,348	34,120	115,828	1,776,296
9999 GRAND TOTAL	1,776,318	50,492	171,987	1,998,797	45,439	67,322	2,111,558

1. FY 2023 increase in OP32 line 923 is attributed to the following:
 - a. Army Medical Research, Development and Acquisition Capabilities: +\$34,053
 - b. Veterinary Treatment Facilities Restoration, Modernization and Sustainment: +10,983
 - c. Federal Contractor Minimum Wage: +\$5,081
2. FY 2023 increase in OP32 line 932 is attributed to Financial Improvement and Audit Readiness: +\$10,430K
3. FY 2023 net decrease in OP32 line 957 is attributed to the following:
 - a. Reduction for one-time Congressional add for additional Facility Restoration and Modernization projects for FY 2022: -\$78,000K
 - b. Army Medical Research, Development and Acquisition Capabilities: +\$12,999
 - c. Veterinary Treatment Facilities Restoration, Modernization and Sustainment: +5,580
 - d. Federal Contractor Minimum Wage: +\$237
4. FY 2023 increase in OP32 line 989 is attributed to the following:
 - a. Army Medical Research, Development and Acquisition Capabilities: +\$27,955
 - b. Federal Contractor Minimum Wage: +\$5,029

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**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2023 President's Budget
Facilities, Sustainment, Restoration, Modernization and Demolition OP-5 Exhibit**

VI. OP 32 Line Items as Applicable (Dollars in thousands):

	FY 2021 <u>Program</u>	<u>Change from FY 2021 to FY 2022</u>		FY 2022 <u>Program</u>	<u>Change from FY 2022 to FY 2023</u>		FY 2023 <u>Program</u>
		<u>Price Growth</u>	<u>Program Growth</u>		<u>Price Growth</u>	<u>Program Growth</u>	
101 EXEC, GEN'L & SPEC SCHEDS	18,328	416	-4,030	14,714	607	-1,345	13,976
103 WAGE BOARD	10,844	246	-20	11,070	457	-100	11,427
104 FN DIRECT HIRE (FNDH)	585	13	112	710	29	-739	0
105 SEPARATION LIABILITY (FNDH)	0	0	26	26	1	-27	0
0199 TOTAL CIVILIAN PERSONNEL COMPENSATION	29,757	675	-3,912	26,520	1,094	-2,211	25,403
308 TRAVEL OF PERSONS	122	4	225	351	7		358
0399 TOTAL TRAVEL	122	4	225	351	7	0	358
401 DLA ENERGY (FUEL PRODUCTS)	0	0	164	164	-12	16	168
402 SERVICE FUND FUEL	0	0	1	1	0	0	1
412 NAVY MANAGED SUPPLY, MATL	0	0	80	80	5	-3	82
416 GSA SUPPLIES & MATERIALS	0	0	119	119	2	1	122
417 LOCAL PURCH SUPPLIES & MAT	0	0	769	769	16	-1	784
422 DLA MAT SUPPLY CHAIN (MEDICAL)	0	0	101	101	1	1	103
0499 TOTAL DEFENSE WORKING CAPITAL FUND SUPPLIES AND MATERIALS	0	0	1,234	1,234	12	14	1,260
503 NAVY FUND EQUIPMENT	0	0	29	29	0	0	29
507 GSA MANAGED EQUIPMENT	0	0	38	38	1	0	39
0599 TOTAL DEFENSE WORKING CAPITAL FUND EQUIPMENT PURCHASES	0	0	67	67	1	0	68
631 NAVY BASE SUPPORT (NFESC)	11	0	27,416	27,427	-118	652	27,961
0699 TOTAL OTHER FUND PURCHASES	11	0	27,416	27,427	-118	652	27,961
771 COMMERCIAL TRANSPORT	0	0	9	9	0	0	9
0799 TOTAL TRANSPORTATION	0	0	9	9	0	0	9
901 FOREIGN NATIONAL INDIRECT HIRE (FNIH)	184	4	-63	125	3	2	130

**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2023 President's Budget
Facilities, Sustainment, Restoration, Modernization and Demolition OP-5 Exhibit**

VI. OP 32 Line Items as Applicable (Dollars in thousands):

	FY 2021 Program	Change from FY 2021 to FY 2022		FY 2022 Program	Change from FY 2022 to FY 2023		FY 2023 Program
		Price Growth	Program Growth		Price Growth	Program Growth	
913 PURCHASED UTILITIES (NON-FUND)	86	3	-89	0	0	0	0
914 PURCHASED COMMUNICATIONS (NON-FUND)	0	0	8	8	0		8
915 RENTS (NON-GSA)	104	3	-107	0	0	0	0
920 SUPPLIES & MATERIALS (NON-FUND)	1,877	56	14,536	16,469	346	-15	16,800
922 EQUIPMENT MAINTENANCE BY CONTRACT	252	8	1,815	2,075	44	-1	2,118
923 FACILITIES SUST, REST, & MOD BY CONTRACT	367,503	11,025	-24,009	354,519	7,445	57,478	419,442
925 EQUIPMENT PURCHASES (NON-FUND)	477	14	38,921	39,412	828	0	40,240
932 MGT PROF SUPPORT SVCS	8,631	259	-8,890	0	0	0	0
955 OTHER COSTS (MEDICAL CARE)	4,671	192	-4,863	0	0	0	0
957 OTHER COSTS (LAND AND STRUCTURES)	262,444	7,873	181,664	451,981	9,492	-38,538	422,935
960 OTHER COSTS (INTEREST AND DIVIDENDS)	10,495	0	-10,495	0	0	0	0
986 MEDICAL CARE CONTRACTS	2,129	87	-2,216	0	0	0	0
987 OTHER INTRA-GOVT PURCH	39,161	1,175	25,648	65,984	1,386	68	67,438
989 OTHER SERVICES	209,606	6,288	-158,061	57,833	1,214	-1,415	57,632
990 IT CONTRACT SUPPORT SERVICES	90	3	-93	0	0	0	0
0999 TOTAL OTHER PURCHASES	907,710	26,990	53,706	988,406	20,758	17,579	1,026,743
9999 GRAND TOTAL	937,600	27,669	78,745	1,044,014	21,754	16,034	1,081,802

1. FY 2021 Facility Restoration and Modernization includes one-time increase of \$31,300K for Natural Disaster Recovery requirements.
2. FY 2023 increase in OP32 line 923 is attributed to the following:
 - a. Army Medical Research, Development and Acquisition Capabilities: +\$34,053
 - b. Veterinary Treatment Facilities Restoration, Modernization and Sustainment: +10,983
3. FY 2023 net decrease in OP32 line 957 is attributed to the following:
 - a. Reduction for one-time Congressional add for additional Facility Restoration and Modernization projects for FY 2022: -\$78,000K
 - b. Army Medical Research, Development and Acquisition Capabilities: +\$12,999
 - c. Veterinary Treatment Facilities Restoration, Modernization and Sustainment: +5,580

Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2023 Budget Estimates
Cost of Medical Activities

(Dollars in Thousands)		FY 2021 Actuals	FY 2022 Enacted	FY 2023 Request	FY 2021/2022		FY 2022/2023	
					Change	Percent	Change	Percent
In-House Care								
0807700DHA	Defense Medical Centers, Hospitals and Medical Clinics-CONUS	6,786,241	6,729,724	7,125,193	-56,517	-0.8%	395,469	5.9%
0807701DHA	Pharmaceuticals-CONUS	1,333,565	1,515,825	1,592,708	182,260	13.7%	76,883	5.1%
0807715DHA	Dental Care Activities-CONUS	415,999	452,109	465,615	36,110	8.7%	13,506	3.0%
0807900DHA	Defense Medical Centers, Hospitals and Medical Clinics-OCONUS	552,714	524,277	525,857	-28,437	-5.1%	1,580	0.3%
0807901DHA	Pharmaceuticals-OCONUS	149,767	151,875	158,432	2,108	1.4%	6,557	4.3%
0807915DHA	Dental Care Activities-OCONUS	35,248	39,770	39,138	4,522	12.8%	-632	-1.6%
	Subtotal In-House Care	9,273,534	9,413,580	9,906,943	140,046	1.5%	493,363	5.2%
Private Sector Care								
0807702DHA	Pharmaceuticals - Purchased Health Care	958,433	924,136	952,687	-34,297	-3.6%	28,551	3.1%
0807703DHA	Pharmaceuticals - National Retail Pharmacy	1,125,866	1,167,994	1,308,962	42,128	3.7%	140,968	12.1%
0807723DHA	TRICARE Managed Care Support (MCS) Contracts	6,896,600	7,430,699	7,453,535	534,099	7.7%	22,836	0.3%
0807738DHA	MTF Enrollees - Purchased Care	2,829,752	3,451,422	3,547,846	621,670	22.0%	96,424	2.8%
0807741DHA	Dental - Purchased Care	293,313	290,642	343,296	-2,671	-0.9%	52,654	18.1%
0807742DHA	Uniformed Services Family Health Program (USFHP)	573,929	609,276	635,869	35,347	6.2%	26,593	4.4%
0807743DHA	Supplemental Care - Health Care	1,598,518	1,800,774	1,865,603	202,256	12.7%	64,829	3.6%
0807745DHA	Supplemental Care - Dental	119,825	109,812	112,221	-10,013	-8.4%	2,409	2.2%
0807747DHA	Continuing Health Education/Capitalization of Assets Program	380,167	288,903	391,676	-91,264	-24.0%	102,773	35.6%
0807749DHA	Overseas Purchased Health Care	378,314	386,917	394,781	8,603	2.3%	7,864	2.0%
0807751DHA	Miscellaneous Purchased Health Care	1,113,741	1,291,771	1,337,863	178,030	16.0%	46,092	3.6%
0807752DHA	Miscellaneous Support Activities	114,780	110,933	110,870	-3,847	-3.4%	-63	-0.1%
	Subtotal Private Sector Care	16,383,238	17,863,279	18,455,209	1,480,041	9.0%	591,930	3.3%
Consolidated Health Support								
0801720DHA	Examining Activities	16,464	10,992	9,183	-5,472	-33.2%	-1,809	-16.5%
0807705DHA	Military Public/Occupational Health	381,948	586,688	556,555	204,740	53.6%	-30,133	-5.1%
0807714DHA	Other Health Activities	352,931	405,622	778,332	52,691	14.9%	372,710	91.9%
0807724DHA	Military Unique Requirements - Other Medical	493,007	474,106	537,785	-18,901	-3.8%	63,679	13.4%
0807725DHA	Aeromedical Evacuation System	3,656	2,470	395	-1,186	-32.4%	-2,075	-84.0%
0807730DHA	Service Support to Other Health Activities - TRANSCOM	0	479	493	479	0.0%	14	2.9%
0807760DHA	Veterinary Services	2,788	3,723	2,559	935	33.5%	-1,164	-31.3%
0807786DHA	Joint Pathology Center (JPC)	26,153	28,280	29,041	2,127	8.1%	761	2.7%
0903300DHA	Support to FACA Advisory Board Activities	2,588	2,037	2,023	-551	-21.3%	-14	-0.7%
	Subtotal Consolidated Health Support	1,279,535	1,514,397	1,916,366	234,862	18.4%	401,969	26.5%

Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2023 Budget Estimates
Cost of Medical Activities

<u>(Dollars in Thousands)</u>		FY 2021 <u>Actuals</u>	FY 2022 <u>Enacted</u>	FY 2023 <u>Request</u>	FY 2021/2022		FY 2022/2023	
					<u>Change</u>	<u>Percent</u>	<u>Change</u>	<u>Percent</u>
Information Management								
0807744DHA	Theater Medical Information Program Joint (TMIP-J)	83,838	0	0	-83,838	-100.0%	0	0.0%
0807746DHA	Joint Operational Medicine Information Systems (JOMIS)	24,190	118,658	170,766	94,468	390.5%	52,108	43.9%
0807758DHA	Cybersecurity	134,341	140,663	148,726	6,322	4.7%	8,063	5.7%
0807759DHA	Military Health System Desktop to Datacenter	331,110	289,188	435,363	-41,922	-12.7%	146,175	50.5%
0807781DHA	Service Medical Information Management/Information Technology (Non-Central)	240,104	128,073	205,994	-112,031	-46.7%	77,921	60.8%
0807783DHA	DHP Information Management/Information Technology Support Programs	33,906	36,236	37,004	2,330	6.9%	768	2.1%
0807784DHA	Integrated Electronic Health Record	3,033	10,429	22,049	7,396	243.9%	11,620	111.4%
0807787DHA	DoD Healthcare Management Systems	412,520	506,235	562,623	93,715	22.7%	56,388	11.1%
0807788DHA	DoD Medical Information Exchange and Interoperability	52,080	113,925	4,412	61,845	118.8%	-109,513	-96.1%
0807793DHA	MHS Tri-Service Information Management/Information Technology	910,149	867,442	664,214	-42,707	-4.7%	-203,228	-23.4%
	Subtotal Information Management	2,225,271	2,210,849	2,251,151	-14,422	-0.6%	40,302	1.8%
Management Activities								
0807704DHA	Defense Health Agency	240,996	251,449	253,495	10,453	4.3%	2,046	0.8%
0807798DHA	Management Activities	96,729	81,689	85,183	-15,040	-15.5%	3,494	4.3%
	Subtotal Management Activities	337,725	333,138	338,678	-4,587	-1.4%	5,540	1.7%
Education and Training								
0806721DHA	Uniformed Services University of the Health Sciences	184,168	182,924	184,964	-1,244	-0.7%	2,040	1.1%
0806761DHA	Other Education and Training	126,339	157,810	149,881	31,471	24.9%	-7,929	-5.0%
	Subtotal Education and Training	310,507	340,734	334,845	30,227	9.7%	-5,889	-1.7%
Base Operations/Communications								
0806276DHA	Facilities Restoration and Modernization - CONUS	159,424	357,253	323,999	197,829	124.1%	-33,254	-9.3%
0806278DHA	Facilities Sustainment - CONUS	262,774	449,683	499,218	186,909	71.1%	49,535	11.0%
0806376DHA	Facilities Restoration and Modernization - OCONUS	106,853	96,175	98,936	-10,678	-10.0%	2,761	2.9%
0806378DHA	Facilities Sustainment - OCONUS	408,549	140,903	159,649	-267,646	-65.5%	18,746	13.3%
0807754DHA	Pollution Prevention	9	298	304	289	3,211.1%	6	2.0%
0807756DHA	Environmental Compliance	13,837	18,078	18,316	4,241	30.6%	238	1.3%
0807779DHA	Facilities Operations - Health Care - CONUS	447,564	475,676	502,915	28,112	6.3%	27,239	5.7%
0807790DHA	Visual Information Systems	6,039	7,723	7,331	1,684	27.9%	-392	-5.1%
0807795DHA	Base Communications - CONUS	40,960	50,696	49,814	9,736	23.8%	-882	-1.7%
0807796DHA	Base Operations - CONUS	269,811	318,864	364,768	49,053	18.2%	45,904	14.4%
0807979DHA	Facilities Operations - Health Care - OCONUS	50,608	56,067	59,431	5,459	10.8%	3,364	6.0%

Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2023 Budget Estimates
Cost of Medical Activities

(Dollars in Thousands)		FY 2021 Actuals	FY 2022 Enacted	FY 2023 Request	FY 2021/2022		FY 2022/2023		
					Change	Percent	Change	Percent	
0807995DHA	Base Communications - OCONUS	2,213	3,198	2,257	985	44.5%	-941	-29.4%	
0807996DHA	Base Operations - OCONUS	7,677	24,183	24,620	16,506	215.0%	437	1.8%	
	Subtotal Base Operations/Communications	1,776,318	1,998,797	2,111,558	222,479	12.5%	112,761	5.6%	
	Subtotal DHP Operations and Maintenance	31,586,128	33,674,774	35,314,750	2,088,646	6.6%	1,639,976	4.9%	
Procurement									
0807720DHA & 0807721DHA	Dental Equipment	376	0	406	-376	-100.0%	406	0.0%	
0807720DHA & 0807721DHA	Food Service, Preventive Medicine, and Pharmacy Equipment	4,029	13,270	6,925	9,241	229.4%	-6,345	-47.8%	
0807720DHA & 0807721DHA	Medical Information System Equipment	6,208	8,570	8,740	2,362	38.0%	170	2.0%	
0807720DHA & 0807721DHA	Medical Patient Care Administrative Equipment	7,036	3,020	6,875	-4,016	-57.1%	3,855	127.6%	
0807720DHA & 0807721DHA	Medical/Surgical Equipment	24,622	41,584	24,932	16,962	68.9%	-16,652	-40.0%	
0807720DHA & 0807721DHA	Other Equipment	31,386	30,522	26,694	-864	-2.8%	-3,828	-12.5%	
0807720DHA & 0807721DHA	Pathology/Lab Equipment	22,256	10,292	21,002	-11,964	-53.8%	10,710	104.1%	
0807720DHA & 0807721DHA	Radiographic Equipment	42,637	164,034	160,208	121,397	284.7%	-3,826	-2.3%	
0807746DHA	Joint Operational Medicine Information System	2,620	0	1,467	-2,620	-100.0%	1,467	0.0%	
0807759DHA	Data to Desktop Center	70,872	72,302	72,601	1,430	2.0%	299	0.4%	
0807787DHA	DoD Healthcare Management System Modernization	232,327	435,414	240,224	203,087	87.4%	-195,190	-44.8%	
	Subtotal Procurement	444,369	779,008	570,074	334,639	75.3%	-208,934	-26.8%	
Research, Development, Test & Evaluation									
0308604DHA	Software & Digital Technology Pilot Program	0	0	137,356	0	0.0%	137,356	0.0%	
0601117DHA	Basic Operational Medical Research Sciences	8,913	9,091	39,568	178	2.0%	30,477	335.2%	
0602115DHA	Applied Biomedical Technology	72,573	84,024	174,009	11,451	15.8%	89,985	107.1%	
0602787DHA	Medical Technology (AFRRI)	1,411	1,439	1,468	28	2.0%	29	2.0%	
0603002DHA	Medical Advanced Technology (AFRRI)	352	359	366	7	2.0%	7	1.9%	
0603115DHA	Medical Technology Development	1,994,150	2,193,397	320,496	199,247	10.0%	-1,872,901	-85.4%	
0604110DHA	Medical Products Support and Advanced Concept Development	149,831	176,860	166,960	27,029	18.0%	-9,900	-5.6%	
0605013DHA	Information Technology Development	16,344	10,866	9,834	-5,478	-33.5%	-1,032	-9.5%	
0605026DHA	DoD Healthcare Management System Modernization (DHMSM)	18,336	15,751	12,024	-2,585	-14.1%	-3,727	-23.7%	
0605045DHA	Joint Operational Medicine Information System (JOMIS)	46,214	52,948	18,082	6,734	14.6%	-34,866	-65.8%	
0605145DHA	Medical Products and Support Systems Development	21,068	21,489	64,030	421	2.0%	42,541	198.0%	
0606105DHA	Medical Program-Wide Activities	48,672	49,645	85,186	973	2.0%	35,541	71.6%	
0607100DHA	Medical Products and Capabilities Enhancement Activities	17,215	17,619	17,971	404	2.3%	352	2.0%	
	Subtotal RDT&E	2,395,079	2,633,488	1,047,350	238,409	10.0%	-1,586,138	-60.2%	
	Total Defense Health Program	34,425,576	37,087,270	36,932,174	2,661,694	7.7%	-155,096	-0.4%	

Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2023 Budget Estimates
Cost of Medical Activities

(Dollars in Thousands)	FY 2021 Actuals	FY 2022 Enacted	FY 2023 Request	FY 2021/2022		FY 2022/2023		
				Change	Percent	Change	Percent	
Medicare Eligible Accrual Fund Receipts								
Direct Care	2,003,300	2,072,900	0	69,600	3.5%	-2,072,900	-100.0%	
Military Personnel Accounts	563,800	578,600	0	14,800	2.6%	-578,600	-100.0%	
Private Sector Care	8,807,614	9,306,573	0	498,959	5.7%	-9,306,573	-100.0%	
Total Medicare Eligible Accrual Fund	11,374,714	11,958,073	0	583,359	5.1%	-11,958,073	-100.0%	
Research, Development, Test & Evaluation By Program Title								
Armed Forces Radiobiology Research Institute (AFRRI)	1,411	1,439	1,468	28	2.0%	29	2.0%	
Biomedical Technology	4,215	4,299	102,889	84	2.0%	98,590	2,293.3%	
Congressionally Directed Programs	1,783,900	2,002,808	0	218,908	12.3%	-2,002,808	-100.0%	
DHA Central Information Technology Development	16,344	10,866	9,834	-5,478	-33.5%	-1,032	-9.5%	
DoD Healthcare Management System Modernization (DHMSM)	18,336	15,751	12,024	-2,585	-14.1%	-3,727	-23.7%	
GDF Medical Research Enhancement	325,791	336,168	343,094	10,377	3.2%	6,926	2.1%	
Joint Operational Medicine Information System (JOMIS)	46,214	52,948	18,082	6,734	14.6%	-34,866	-65.8%	
Medical Advanced Technology (AFRRI)	352	359	366	7	2.0%	7	1.9%	
Medical Products and Support Systems Development	0	0	42,111	0	0.0%	42,111	0.0%	
Medical Products Support and Advanced Concept Development	4,080	4,162	26,108	82	2.0%	21,946	527.3%	
Medical Program-Wide Activities	48,672	49,645	85,186	973	2.0%	35,541	71.6%	
Medical Technology Development	143,264	155,043	238,537	11,779	8.2%	83,494	53.9%	
Software & Digital Technology Pilot Program (DMIX & EIDS)	0	0	137,356	0	0.0%	137,356	0.0%	
Total Research, Development, Test and Evaluation	2,392,579	2,633,488	1,017,055	240,909	10.1%	-1,616,433	-61.4%	

1/ FY 2021 actuals include Division C, Title IX and Division J, Title IV of the Consolidated Appropriations Act, 2021 (P.L. 116-260) \$365.098M, Fisher House of \$10.000M and excludes funds to VA for Lovell FHCC and the Joint Incentive Fund (\$141.865 million); CSI of -600.235M for O&M, +1,830.114M for RDT&E, and -73.557M for Proc

2/ FY 2022 reflects enactment and includes \$251.9 million for Direct War, transfers to FHCC (\$137 million), Fisher House (\$5.0 million) and JIF (\$15.0 million); CSI of -224.733M for O&M, +2,002.8108M for RDT&E, and -23.300M for Proc

3/ FY 2023 request includes \$116.171 million for Overseas Operations Costs

**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2023 President's Budget
Personnel Summary**

	<u>FY 2021 Actuals</u>		<u>FY 2022 Estimate</u>		<u>FY 2023 Request</u>		<u>FY 2022-2023 Change</u>	
	<u>End Strength</u>	<u>Avg Strength</u>	<u>End Strength</u>	<u>Avg Strength</u>	<u>End Strength</u>	<u>Avg Strength</u>	<u>End Strength</u>	<u>Avg Strength</u>
<u>Active Military – Assigned to DHP</u>								
<u>Army Total</u>	<u>19,735</u>	<u>20,082</u>	<u>20,996</u>	<u>20,366</u>	<u>18,449</u>	<u>19,723</u>	<u>-2,547</u>	<u>-643</u>
Officers	8,885	8,819	9,544	9,215	8,941	9,243	-603	28
Enlisted	10,850	11,263	11,452	11,151	9,508	10,480	-1,944	-671
<u>Navy Total</u>	<u>24,005</u>	<u>24,264</u>	<u>23,532</u>	<u>23,769</u>	<u>25,583</u>	<u>24,558</u>	<u>2,051</u>	<u>789</u>
Officers *	7,860	7,659	7,901	7,881	7,946	7,924	45	43
Enlisted	16,145	16,605	15,631	15,888	17,637	16,634	2,006	746
<u>Air Force Total</u>	<u>27,578</u>	<u>28,105</u>	<u>27,337</u>	<u>27,458</u>	<u>26,390</u>	<u>26,864</u>	<u>-947</u>	<u>-594</u>
Officers	9,659	9,946	9,927	9,793	9,580	9,754	-347	-39
Enlisted	17,919	18,159	17,410	17,665	16,810	17,110	-600	-555
<u>Total Active Duty</u>	<u>71,318</u>	<u>72,451</u>	<u>71,865</u>	<u>71,593</u>	<u>70,422</u>	<u>71,145</u>	<u>-1,443</u>	<u>-448</u>
Officers	26,404	26,424	27,372	26,889	26,467	26,921	-905	32
Enlisted	44,914	46,027	44,493	44,704	43,955	44,224	-538	-480
* Includes one USMC DHP officer strength								
<u>Active Military - Non DHP Medical</u>								
<u>Army Total</u>	<u>22,927</u>	<u>21,451</u>	<u>23,296</u>	<u>23,112</u>	<u>23,296</u>	<u>23,296</u>	<u>0</u>	<u>184</u>
Officers	5,824	4,980	5,969	5,897	5,969	5,969	0	72
Enlisted	17,103	16,471	17,327	17,215	17,327	17,327	0	112
<u>Navy Total</u>	<u>13,071</u>	<u>12,588</u>	<u>13,156</u>	<u>13,114</u>	<u>13,160</u>	<u>13,158</u>	<u>4</u>	<u>44</u>
Officers	2,818	2,749	2,832	2,825	2,842	2,837	10	12
Enlisted	10,253	9,839	10,324	10,289	10,318	10,321	-6	32
<u>Air Force Total</u>	<u>3,065</u>	<u>2,616</u>	<u>3,161</u>	<u>3,114</u>	<u>3,266</u>	<u>3,214</u>	<u>105</u>	<u>100</u>
Officers	1,386	1,207	1,423	1,405	1,466	1,445	43	40
Enlisted	1,679	1,409	1,738	1,709	1,800	1,769	62	60
<u>Total Active Duty</u>	<u>39,063</u>	<u>36,655</u>	<u>39,613</u>	<u>39,340</u>	<u>39,722</u>	<u>39,668</u>	<u>109</u>	<u>328</u>
Officers	10,028	8,936	10,224	10,127	10,277	10,251	53	124
Enlisted	29,035	27,719	29,389	29,213	29,445	29,417	56	204

**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2023 President's Budget
Personnel Summary**

	FY 2021 Actuals		FY 2022 Estimate		FY 2023 Request		FY 2022-2023 Change	
	<u>End Strength</u>	<u>FTEs</u>	<u>End Strength</u>	<u>FTEs</u>	<u>End Strength</u>	<u>FTEs</u>	<u>End Strength</u>	<u>FTEs</u>
I. Civilian Personnel - US Direct Hire								
Army	28,918	28,550	31,415	31,052	201	195	-31,214	-30,857
Navy	8,828	8,549	9,090	8,843	213	166	-8,877	-8,677
Air Force	5,872	5,584	5,872	4,952	9	9	-5,863	-4,943
Defense Health Agency	11,943	11,076	10,842	10,143	57,311	54,730	46,469	44,587
Total	<u>55,561</u>	<u>53,759</u>	<u>57,219</u>	<u>54,990</u>	<u>57,734</u>	<u>55,100</u>	<u>515</u>	<u>110</u>
II. Civilian Personnel - Foreign National Direct Hire								
Army	503	521	480	475	0	0	-480	-475
Navy	367	367	363	340	363	340	0	0
Air Force	193	198	193	172	0	0	-193	-172
Defense Health Agency	0	0	0	0	931	879	931	879
Total	<u>1,063</u>	<u>1,086</u>	<u>1,036</u>	<u>987</u>	<u>1,294</u>	<u>1,219</u>	<u>258</u>	<u>232</u>
III. Civilian Personnel - Foreign National Indirect Hire								
Army	616	449	550	533	0	0	-550	-533
Navy	437	437	448	430	448	430	0	0
Air Force	167	162	167	161	1	1	-166	-160
Defense Health Agency	5	3	4	5	645	645	641	640
Total	<u>1,225</u>	<u>1,051</u>	<u>1,169</u>	<u>1,129</u>	<u>1,094</u>	<u>1,076</u>	<u>-75</u>	<u>-53</u>
IV. Total Civilian Personnel								
Army	30,037	29,520	32,445	32,060	201	195	-32,244	-31,865
Navy	9,632	9,353	9,901	9,613	1,024	936	-8,877	-8,677
Air Force	6,232	5,944	6,232	5,285	10	10	-6,222	-5,275
Defense Health Agency	11,948	11,079	10,846	10,148	58,887	56,254	48,041	46,106
Total *	<u>57,849</u>	<u>55,896</u>	<u>59,424</u>	<u>57,106</u>	<u>60,122</u>	<u>57,395</u>	<u>698</u>	<u>289</u>
V. Summary Civilian Personnel								
U.S. Direct Hire	55,561	53,759	57,219	54,990	57,734	55,100	515	110
Foreign National Direct Hire	1,063	1,086	1,036	987	1,294	1,219	258	232
Foreign National Indirect Hire	1,225	1,051	1,169	1,129	1,094	1,076	-75	-53
Total, Civilians *	<u>57,849</u>	<u>55,896</u>	<u>59,424</u>	<u>57,106</u>	<u>60,122</u>	<u>57,395</u>	<u>698</u>	<u>289</u>

* Includes reimbursable civilians - memo

**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2023 President's Budget
Personnel Summary**

	<u>FY 2021 Actuals</u>		<u>FY 2022 Estimate</u>		<u>FY 2023 Request</u>		<u>FY 2022-2023 Change</u>	
	<u>End Strength</u>	<u>FTEs</u>	<u>End Strength</u>	<u>FTEs</u>	<u>End Strength</u>	<u>FTEs</u>	<u>End Strength</u>	<u>FTEs</u>
<u>SPECIAL INTEREST MANPOWER</u>								
<u>Defense Health Agency Management Headquarters (PE 0807898)</u>								
Military	43	43	46	45	47	47	1	2
Civilian	239	244	240	240	256	256	16	16
<u>Army Management Headquarters (PE 0807798)</u>								
Military	0	0	0	0	0	0	0	0
Civilian	4	15	0	0	0	0	0	0
<u>Navy Management Headquarters (PE 0807798)</u>								
Military	0	0	8	4	5	7	-3	3
Civilian	0	0	111	108	0	0	-111	-108
<u>Air Force Management Headquarters (PE 0807798)</u>								
Military	81	132	1	41	1	1	0	-40
Civilian	0	0	0	0	0	0	0	0

Note: Some numbers might not add due to rounding

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**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2023 President's Budget
Medical Workload data - DHP Summary**

	<u>FY 2021 Actuals</u>	<u>FY 2022 Estimate</u>	<u>FY 2023 Estimate</u>	<u>FY 2021-2022 Change</u>	<u>FY 2022-2023 Change</u>
<u>Population - Eligible Beneficiaries, CONUS</u>					
Active Duty	1,451,003	1,451,878	1,434,145	875	-17,733
Active Duty Family Members	1,809,017	1,813,572	1,793,550	4,555	-20,022
Retirees	1,011,787	1,009,454	1,007,610	-2,333	-1,844
Family Members of Retirees	2,411,285	2,408,272	2,405,794	-3,013	-2,478
Subtotal Eligible	6,683,092	6,683,176	6,641,099	84	-42,077
Medicare Eligible Beneficiaries	2,410,371	2,433,696	2,455,106	23,325	21,410
Total Eligible Beneficiaries	9,093,463	9,116,872	9,096,205	23,409	-20,667
<u>Population - Eligible Beneficiaries, OCONUS</u>					
Active Duty	178,821	178,744	175,589	-77	-3,155
Active Duty Family Members	127,858	128,032	125,753	174	-2,279
Retirees	26,400	26,317	26,249	-83	-68
Family Members of Retirees	83,524	83,273	83,071	-251	-202
Subtotal Eligible	416,603	416,366	410,662	-237	-5,704
Medicare Eligible Beneficiaries	92,262	93,233	94,110	971	877
Total Eligible Beneficiaries	508,865	509,599	504,772	734	-4,827
<u>Population - Eligible Beneficiaries, Worldwide</u>					
Active Duty	1,630,469	1,631,266	1,610,375	797	-20,891
Active Duty Family Members	1,936,875	1,941,603	1,919,303	4,728	-22,300
Retirees	1,038,187	1,035,771	1,033,859	-2,416	-1,912
Family Members of Retirees	2,494,809	2,491,545	2,488,864	-3,264	-2,681
Subtotal Eligible	7,100,340	7,100,185	7,052,401	-155	-47,784
<u>Medicare Eligible Beneficiaries:</u>					
Active Duty Family Members	4,650	4,652	4,597	2	-55
Guard/Reserve Family Members	1,559	1,580	1,583	21	3
Eligible Retirees	1,210,777	1,225,743	1,238,969	14,966	13,226
Eligible Family Members of Retirees	782,322	791,880	800,355	9,558	8,475
Survivors	500,547	500,296	500,937	-251	641
Others	2,133	2,133	2,133	0	0
Total Medicare Eligible Beneficiaries	2,501,988	2,526,284	2,548,574	24,296	22,290
Total Eligible Beneficiaries	9,602,328	9,626,469	9,600,975	24,141	-25,494

Notes:

1. FY 2022 - 2023 estimates are projected numbers of MHS eligible beneficiaries and are based on (a) future Budget End Strengths of Active Duty and Active Guard/Reserve members and (b) the DoD's Actuary's projection of retirees.
2. Active Duty and Active Duty Guard/Reserve beneficiaries were excluded from being counted as Medicare Eligible.
3. The US "Medicare Eligible Beneficiaries" are: Active Duty Family Members, Guard/Reserve Family Members, Eligible Retirees, Eligible Family Members of Retirees, Inactive Guard/Reserve, Inactive Guard/Reserve Family Members, Survivors, and Others.
4. The Worldwide "Eligible Family Members of Retirees" are: Family Members of Retirees, Inactive Guard/Reserves, and Inactive Guard/Reserve Family Members.

**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2023 President's Budget
Medical Workload data - DHP Summary**

	<u>FY 2021</u> <u>Actuals</u>	<u>FY 2022</u> <u>Estimate</u>	<u>FY 2023</u> <u>Estimate</u>	<u>FY 2021-2022</u> <u>Change</u>	<u>FY 2022-2023</u> <u>Change</u>
<u>Enrollees - Direct Care</u>					
TRICARE Region - East	1,692,489	1,692,452	1,681,062	-37	-11,390
TRICARE Region - West	959,851	959,830	953,370	-21	-6,460
TRICARE Region - Europe	114,546	114,544	113,773	-2	-771
TRICARE Region - Pacific	130,720	130,717	129,837	-3	-880
TRICARE Region - Latin America	2,245	2,245	2,230	0	-15
Alaska	51,434	51,433	51,087	-1	-346
Sub-Total CONUS Regions	<u>2,703,774</u>	<u>2,703,715</u>	<u>2,685,519</u>	<u>-59</u>	<u>-18,196</u>
Sub-Total OCONUS Regions	<u>247,511</u>	<u>247,506</u>	<u>245,840</u>	<u>-5</u>	<u>-1,666</u>
Total Direct Care Enrollees	<u>2,951,285</u>	<u>2,951,221</u>	<u>2,931,359</u>	<u>-64</u>	<u>-19,862</u>

Notes:

1. FY 2022 enrollee estimates include Direct War projections as this funding is in the FY 2022 base.
2. FY 2022 estimates are updated since the President's Budget submission. These figures are based on current data and trends analysis that was used in the forecasts for the FY 2023 estimates.

	<u>FY 2021</u> <u>Actuals</u>	<u>FY 2022</u> <u>Estimate</u>	<u>FY 2023</u> <u>Estimate</u>	<u>FY 2021-2022</u> <u>Change</u>	<u>FY 2022-2023</u> <u>Change</u>
<u>Infrastructure</u>					
Inpatient Facilities	49	47	47	-2	0
Medical Clinics	465	535	535	70	0
Dental Clinics	192	137	137	-55	0

Notes:

Change from FY 2021 to FY 2022

1. Inpatient Facilities: Change from Hospital to Medical Clinics (NHC Oak Harbor, WA and Langley AFB, VA)
2. Medical Clinics: There is no increase in actual building structures. The change in facility count is attributed to 70 DMIS IDs aligned to the Clinics count (including NHC Oak Harbor and Langley AFB) in order to match the DMIS ID table with MHS GENESIS Patient Care location files and to reduce DMIS ID duplication at same locations.
3. Dental Clinics: 53 deactivations, 2 changed from Dental clinics to medical clinics.

No change noted from FY 2022 to FY 2023

**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2023 President's Budget
Medical Workload data - DHP Summary**

	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2021-2022 Change</u>	<u>FY 2022-2023 Change</u>
<u>Direct Care System Workload (from M2 and Business Planning Tool)</u>					
Inpatient Admissions, Non-Weighted (SIDR Dispositions-All)	141,514	141,958	139,965	444	-1,993
Inpatient Admissions, Occupied Bed Days (Mental Health Only)	73,477	73,708	72,673	231	-1,035
Average Length of Stay (ALL Bed Days/All Dispositions)	3	3	3	0	0
Ambulatory Visits, Non-Weighted (Encounters, CAPER)	34,560,893	34,669,396	34,182,568	108,503	-486,828
Number of Outpatient Pharmacy Prescriptions (30-Day equivalents)	33,111,030	34,183,768	34,598,299	1,072,738	414,531

Notes:

1. Data source is MHS Mart (M2).
2. Data excludes Inpatient Admission, Weighted (MS-DRG RWPs, Non Mental Health), Ambulatory Visits, Weighted (Adj Provider Aggregate RVUs, CAPER), and Ambulatory Procedures, Weighted (Aggregate Weighted APCs, CAPER) due to data quality issues with the Weighted values in M2 from MHS GENESIS sites.
3. Workload excludes Tricare for Life (TFL) patients.
4. Data Source for Number of Outpatient Pharmacy Prescriptions (30-day equivalents) is the Pharmacy Data Transcription Service (PDTS) database.
5. FY 2022 workload estimate includes Direct War projections as this funding is in the FY 2022 base.
6. FY 2022 estimates are updated since the President's Budget submission. These figures are based on current data and trends analysis that was used in the forecasts for the FY 2023 estimates.

**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2023 President's Budget
Medical Workload data - DHP Summary**

	<u>FY 2021 Actuals</u>	<u>FY 2022 Estimate</u>	<u>FY 2023 Estimate</u>	<u>FY 2021-2022 Change</u>	<u>FY 2021-2023 Change</u>
<u>Dental Workload (Dental Weighted Values (DWVs)(from Components)</u>					
CONUS	9,702,935	9,721,978	9,735,918	19,043	13,940
OCONUS	2,206,635	2,177,923	2,079,443	-28,712	-98,480
Total DWVs	11,909,570	11,899,901	11,815,361	-9,669	-84,540
<u>CONUS</u>					
Active Duty	9,114,620	9,150,515	9,163,636	35,895	13,121
Non-Active Duty	588,315	571,463	572,282	-16,852	819
Total CONUS	9,702,935	9,721,978	9,735,918	19,043	13,940
<u>OCONUS</u>					
Active Duty	1,806,770	1,786,052	1,705,291	-20,718	-80,761
Non-Active Duty	399,865	391,871	374,152	-7,994	-17,719
Total OCONUS	2,206,635	2,177,923	2,079,443	-28,712	-98,480

**Defense Health Program
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Fiscal Year (FY) 2023 President's Budget
Medical Workload data - DHP Summary**

	<u>FY 2021 Actuals</u>	<u>FY 2022 Estimate</u>	<u>FY 2023 Estimate</u>	<u>FY 2021-2022 Change</u>	<u>FY 2022-2023 Change</u>
<u>Prime Enrollees - Managed Care Support Contract</u>					
TRICARE Region - East	954,137	954,238	947,030	101	-7,208
TRICARE Region - West	384,709	384,805	380,889	96	-3,916
Total MCS Contracts	1,338,846	1,339,043	1,327,919	197	-11,124
<u>TRICARE Select Enrollees</u>					
TRICARE Region - East	1,392,238	1,391,867	1,388,748	-371	-3,119
TRICARE Region - West	564,865	565,025	563,638	160	-1,387
Total Select	1,957,103	1,956,892	1,952,386	-211	-4,506
TRICARE Region - Overseas - Europe, Pacific, Latin America	508,865	509,598	504,772	733	-4,826
Total MCSC, Select and TRICARE Overseas	3,804,814	3,805,533	3,785,077	719	-20,456

Notes:

1. FY 2022 estimates are updated since the President's Budget submission. These figures are based on current data and trends analysis that was used in the forecasts for the FY 2023 estimates.
2. All data excludes TRICARE for Life beneficiaries paid by MERHCF and Tricare Dual Eligible Fiscal Intermediary Contract (TDEFIC).
3. Projection of Eligible Population (PEP) is the source for Civilian Prime, Select, and Overseas enrollment future year estimates. Source for MCSC enrollees is MHS Mart (M2), Defense Enrollment Eligibility Reporting System (DEERS).
4. Overseas enrollee counts include Prime, Prime Remote, and Select beneficiaries enrolled under Tricare Overseas Prime (TOP) contract.
5. Enrollment is exclusively to Private Sector Care Managed Care Support Contract providers.
6. FY 2022 enrollee estimates include Direct War projections as this funding is in the FY 2022 base.

**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2023 President's Budget
Medical Workload data - DHP Summary**

	<u>FY 2021</u> <u>Actuals</u>	<u>FY 2022</u> <u>Enacted</u>	<u>FY 2023</u> <u>Request</u>	<u>FY 2021-</u> <u>2022</u> <u>Change</u>	<u>FY 2022-</u> <u>2023</u> <u>Change</u>
<u>Private Sector Care System Workload</u>					
Outpatient-Visits	74,656,872	80,242,298	79,580,125	5,585,426	-662,173
Outpatient-Weighted (Relative Value Units, RVUs)	145,886,012	156,800,419	155,506,476	10,914,407	-1,293,943
Inpatient-Admissions	294,681	316,727	314,114	22,046	-2,613
Inpatient-Weighted (Relative Weighted Products, RWPs)	283,867	305,104	302,587	21,237	-2,517
<u>Pharmacy</u>					
Retail - Number of Scripts (30-day equivalents)	22,282,735	24,162,446	24,933,305	1,879,711	770,859
Mail Order - Number of Scripts (30-day equivalents)	12,842,203	13,802,647	14,078,700	960,444	276,053
<u>TRICARE</u>					
Dental Program Enrollment	706,894	706,879	702,121	-15	-4,758
<u>Uniformed Services Family Health Plan</u>					
Enrollees (Non-Medicare eligible, DoD Only)	109,375	111,550	113,769	2,175	2,219

Workload Notes:

1. FY 2022 estimates are updated since the President's Budget submission. These figures are based on current data and trends analysis that was used in the forecasts for the FY 2023 estimates.
2. FY 2022 and FY 2023 USFHP enrollee and Dental Program estimates are based on the population trend.
3. FY 2022 workload estimate includes Direct War projections as this funding is in the FY 2022 base.
4. Data Source for Retail and Mail Order Number of Scripts (30-day equivalents) is the Pharmacy Data Transcription Service (PDTs) database.

**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2023 President's Budget
Advisory and Assistance Services**

Appropriation: Operation & Maintenance

		<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>
		<u>Actual</u>	<u>Enacted</u>	<u>Request</u>
I.	Management & Professional Support Services			
	FFRDC Work	446,679	300,938	302,542
	Non-FFRDC Work	4,174	3,773	2,882
	Subtotal	450,853	304,711	305,424
II.	Studies, Analyses & Evaluation			
	FFRDC Work	101,713	22,782	22,648
	Non-FFRDC Work	5,655	5,481	4,958
	Subtotal	107,368	28,263	27,606
III.	Engineering & Technical Services			
	FFRDC Work	51,424	5,003	5,047
	Non-FFRDC Work			
	Subtotal	51,424	5,003	5,047
	Total	609,645	337,977	338,077

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**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2023 President's Budget**

	FY 2021	FY 2022	FY 2023
OPR & MAINT			
Active			
<u>Domestic</u>			
Compliance			
<u>Air</u>			
Stationary and Mobile Sources	0.021	0.021	0.021
<u>Compliance Cross-Cutting Programs</u>			
Compliance Education and Training	0.938	2.368	2.011
Multi-Program Management	0.881	0.875	0.878
Total Compliance Cross-Cutting Programs	1.840	3.264	2.910
<u>Compliance manpower</u>			
Compliance Manpower	2.990	3.420	3.408
<u>Compliance Other</u>			
Miscellaneous Compliance Activities	1.459	1.299	1.317
<u>Compliance Related Cleanup</u>			
Other Compliance-Related Assessment and Cleanup	0.000	0.000	0.000
<u>Planning</u>			
Environmental Impact Analysis	0.080	0.080	0.085
<u>Storage and Disposal</u>			
Hazardous Waste (RCRA - C)	2.391	4.712	5.172
Solid Waste (RCRA – D)	2.028	2.018	2.016
USTs (RCRA – I)	0.000	0.000	0.000
Total Storage and Disposal	8.948	11.529	11.999
<u>Toxic Substances</u>			
Controlled Substances	0.000	0.000	0.000
EPCRA Reporting (TRI and Tier I&II)	0.005	0.005	0.005
Total Toxic Substances	0.005	0.005	0.005

**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2023 President's Budget**

	FY 2021	FY 2022	FY 2023
OPR & MAINT			
Active (Continued)			
<u>Domestic (Continued)</u>			
Compliance (Continued)			
<u>Water</u>			
Safe Drinking Water	0.175	1.050	1.078
Spill Prevention and Response/ASTs	0.020	0.019	0.020
Stormwater	0.000	0.000	0.000
Wastewater	0.025	0.025	0.025
Total Water	0.220	1.094	1.123
Total Compliance	11.013	15.892	16.036
Pollution Prevention			
<u>Pollution Prevention Other</u>			
Miscellaneous Pollution Prevention Activities	0.000	0.000	0.000
<u>Pollution Prevention Projects</u>			
Hazardous Material/Hazardous and Solid Waste	0.009	0.298	0.304
Total Pollution Prevention	0.009	0.298	0.304
Total Domestic	11.022	16.190	16.340

**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2023 President's Budget**

	FY 2021	FY 2022	FY 2023
OPR & MAINT			
Active			
<u>Foreign</u>			
Compliance			
<u>Air</u>			
Stationary and Mobile Sources	0.003	0.002	0.002
<u>Compliance Cross-Cutting Programs</u>			
Compliance Education and Training	0.022	0.138	0.150
Multi-Program Management	0.108	0.107	0.107
Total Compliance Cross-Cutting Programs	0.133	0.247	0.260
<u>Compliance manpower</u>			
Compliance Manpower	0.450	0.500	0.527
<u>Compliance Other</u>			
Miscellaneous Compliance Activities	0.563	0.024	0.025
<u>Planning</u>			
Environmental Impact Analysis	0.504	0.000	0.000
<u>Storage and Disposal</u>			
Hazardous Waste (RCRA - C)	0.631	0.568	0.581
Solid Waste (RCRA – D)	0.505	0.505	0.538
USTs (RCRA – I)	0.000	0.000	0.000
Total Storage and Disposal	2.653	1.597	1.671
<u>Toxic Substances</u>			
EPCRA Reporting (TRI and Tier I&II)	0.000	0.000	0.000
<u>Water</u>			
Safe Drinking Water	0.038	0.342	0.349
Pollution Prevention			
<u>Pollution Prevention Projects</u>			
Hazardous Material/Hazardous and Solid Waste	0.000	0.000	0.000
Total Pollution Prevention	0.000	0.000	0.000
Total Foreign	2.824	2.186	2.280

**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2023 President's Budget**

	FY 2021	FY 2022	FY 2023
OPR & MAINT			
Active (Summary)			
Environmental Activity Cost Type Totals			
Compliance	13.837	18.078	19.316
Pollution Prevention	0.009	0.298	0.304
Conservation	0.000	0.000	0.000
Total	13.846	18.376	18.620
Location Totals			
Domestic	11.022	16.190	16.340
Foreign	2.824	2.186	2.280
Total	13.846	18.376	18.620
 DHA TOTALS			
Environmental Activity Cost Type Totals			
Compliance	13.837	18.078	19.316
Pollution Prevention	0.009	0.298	0.304
Conservation	0.000	0.000	0.000
Total	13.846	18.376	18.620
Location Totals			
Domestic	11.022	16.190	16.340
Foreign	2.824	2.186	2.280
Total	13.846	18.376	18.620

**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2023 President's Budget
Major DoD Headquarters Activities**

Category/ Organization Appropriation	FY 2021 Actuals				FY 2022 Estimate				FY 2023 Request			
	<u>Military End Strength</u>	<u>Civ FTEs</u>	<u>Total Manpower</u>	<u>Total Obligation (\$ 000)</u>	<u>Military End Strength</u>	<u>Civ FTEs</u>	<u>Total Manpower</u>	<u>Total Obligation (\$ 000)</u>	<u>Military End Strength</u>	<u>Civ FTEs</u>	<u>Total Manpower</u>	<u>Total Obligation (\$ 000)</u>
DHP, 0807798 O&M, DHP	81	259	340	54,340	9	348	357	56,069	6	256	262	38,400
DHP, 0807898 O&M, DHP	43		43		46		46		47		47	
Total	124	259	383	54,340	55	348	403	56,069	53	256	309	38,400

*Note this data is skewed many MHA CIVs are now in 0807704 (post Service transition to DHA, so it looks like we have decreased from 900 CIVs+ to 256 but in fact they are all siting in DCFM in the wrong PE. Dan Lee is aware. Hoping the CIVs are flagged as MHA resources in the tool for FY24 so we can process a cleanup action to move them from 0807704 into 0807898 (a NEW DHA CIV PE) have a true MHA exhibit in the future.

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**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2023 President's Budget
Procurement Program**

Appropriation Procurement (\$ M)

<u>Line No.</u>	<u>Item Nomenclature</u>	<u>FY 2021 Actual</u>	<u>FY 2022 Enacted</u>	<u>FY 2023 Request</u>	<u>FY 2024 Estimate</u>	<u>FY 2025 Estimate</u>	<u>FY 2026 Estimate</u>	<u>FY 2027 Estimate</u>
1	Items greater than \$250,000 each:							
	Medical Equipment - Replacement/Modernization	115,618	250,366	234,157	242,634	251,429	260,664	270,723
	Medical Equipment - New Facility Outfitting	22,932	20,926	21,625	22,344	23,449	24,597	25,555
	Joint Operational Medicine Information System	2,620	0	1,467	28,913	29,491	30,081	30,682
	Military Health System - Desktop to Datacenter	70,872	72,302	72,601	74,055	75,536	77,047	78,588
	Information Technology Development and Sustainment DoD Healthcare Management System Modernization	232,327	415,114	240,224	15,594	0	0	0
	DHP Procurement FY23 Totals	444,369	758,708	570,074	383,540	379,905	392,389	405,548

The Defense Health Program (DHP) procurement budget represents a critical element of the Department's capability to provide high quality, cost effective health care for active duty and other eligible beneficiaries. Funds identified in this submission support the acquisition of equipment for facilities in the Army, Navy, Air Force, and National Capital Region Medical Directorate (NCRMD). Those facilities range from sophisticated tertiary care medical centers to outpatient and dental clinics and physiological training units. This equipment is essential to provide high quality health care services that meet accepted standards of practice. The required safety standards, related laws and regulatory requirements from credentialing and health care standard setting organizations influence and affect the requirement for, cost of, and replacement and modernization of medical equipment. Without the identified resources, the DHP's capability to meet the Department's medical equipment requirements will be severely degraded.

The most significant medical equipment investments will be in the radiographic, surgical, and information systems functional areas. The driving factors are rapid technological advancements in these areas and the need for DoD's health care delivery system to maintain the standards of care set by the civilian health care sector. Procurement investments for information systems will cover software license acquisitions, infrastructure, and hardware replacement supporting the Department of Defense's Military Health System (MHS) Information Technology.

**Defense Health Program
Operation and Maintenance, Defense-Wide
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Procurement Program**

The new facility outfitting program element of the DHP's procurement budget funds the acquisition and installation of commercially available equipment to furnish new and expanded facilities being completed under military construction projects in support of dental services, health care delivery, health care training, and other health care activities. The items range from dental, surgical, radiographic, and pathologic equipment to medical administrative support equipment. The new facility outfitting program provides critical support to the DHP's military medical construction program.

Joint Operational Medicine Information Systems funding will be used to acquire and field Department of Defense's (DoD's) operational medicine information systems using Military Health System (MHS) GENESIS Electronic Health Record (EHR), while developing and fielding new theater capabilities that enable comprehensive health services to meet Warfighter requirements for military medical operations. Joint Operational Medicine Information Systems serve as the primary tactical system to meet the needs of the Warfighter by enabling the provision of coordinated healthcare services. Procurement will be used for integration activities, software Licenses, utilities and tools. Funding will also be used to support maintenance of government-approved laboratory infrastructure, software maintenance, hardware procurement and technical refreshes.

The MHS Desktop to Datacenter includes resources for the design, build, testing, installation, fielding, upgrades and sustainment of information technology (IT) supporting the DoD's ability to provide and maintain infrastructure and enterprise support services for Military Health System (MHS) centrally managed IT systems in all managed health care regions worldwide.

The DHMSM program acquired an integrated inpatient/outpatient Best of Suite (BoS) electronic health record (EHR) solution, augmented by the Best of Breed (BoB) product(s). The overarching goal of the program is to enable healthcare teams to deliver high-quality, safe care and preventive services to patients through the use of easily accessible standards-based computerized patient records. The anticipated benefits include: improved accuracy of diagnoses and medication; improved impact on health outcomes; increased patient participation in the healthcare process; improved patient-centered care coordination; and increased practice efficiencies in all settings, including all DoD operational environments.

**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2023 President's Budget
Procurement Budget Item Justification**

BUDGET ITEM JUSTIFICATION SHEET

DATE: March 2022

APPROPRIATION / BUDGET ACTIVITY : 97*0130

P-1 ITEM NOMENCLATURE: Replacement/Modernization

	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
	Actual	Enacted	Request	Estimate	Estimate	Estimate	Estimate
Quantity							
Total Cost (\$ M)	115.618	250.366	234.157	242.634	251.429	260.664	270.723
Dental Equipment	0.376	0.000	0.406	0.422	0.438	0.455	0.473
Food Ser, Preventive Med, Pharmacy Equip	3.724	12.907	6.548	6.707	6.852	7.120	7.407
Medical Information System Equipment	6.208	8.570	8.740	8.914	9.093	9.276	9.461
Medical Patient Care Administrative Equip	7.036	3.020	6.875	7.032	7.173	7.316	7.462
Medical/Surgical Equipment	23.098	39.771	23.048	22.934	23.830	24.761	25.786
Other Equipment	15.556	18.043	13.845	14.221	14.507	14.798	15.094
Pathology/Lab Equipment	21.883	9.848	20.541	21.475	22.315	23.186	24.153
Radiographic Equipment	37.737	158.207	154.154	160.930	167.220	173.751	180.885

REMARKS

The most significant medical equipment investments will be in the pathology/lab equipment along with radiographic, surgical, and information systems functional areas. The driving factors are rapid technological advancements in these areas and the need for DoD's health care delivery system to maintain the standards of care set by the civilian health care sector. Procurement investments for information systems will cover software license acquisitions, and hardware replacement supporting the Department of Defense's Military Health System (MHS) Information Technology.

Financing an adequate equipment acquisition budget is critical in retaining the Department's medical workload in-house and controlling escalating purchased healthcare O&M costs in the private sector. The items supported by this budget are the result of an extensive investment equipment justification process and are necessary to provide properly trained medical department personnel and high quality, cost effective health care services for the eligible beneficiary population.

P-40 Exhibit
DHP

**Defense Health Program
Operation and Maintenance, Defense-Wide
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Procurement Budget Item Justification**

APPROPRIATION / BUDGET ACTIVITY : 97*0130

P-1 ITEM NOMENCLATURE: New Facility Outfitting

	FY 2021 Actual	FY 2022 Enacted	FY 2023 Request	FY 2024 Estimate	FY 2025 Estimate	FY 2026 Estimate	FY 2027 Estimate
Quantity							
Total Cost (\$ M)	22.932	20.926	21.625	22.344	23.449	24.597	25.555
Dental Equipment	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Food Ser, Preventive Med, Pharmacy Equip	0.305	0.363	0.377	0.392	0.407	0.423	0.439
Medical Information System Equipment	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Medical Patient Care Administrative Equip	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Medical/Surgical Equipment	1.524	1.813	1.884	1.957	2.033	2.112	2.194
Other Equipment	15.830	12.479	12.849	13.226	13.976	14.755	15.330
Pathology/Lab Equipment	0.373	0.444	0.461	0.479	0.498	0.517	0.537
Radiographic Equipment	4.900	5.827	6.054	6.290	6.535	6.790	7.055

REMARKS

The new facility outfitting program element of the DHP's procurement budget funds the acquisition and installation of commercially available equipment to furnish new and expanded facilities being completed under military construction projects in support of dental services, health care delivery, health care training, and other health care activities. The items range from dental, surgical, radiographic, and pathologic equipment to medical administrative support equipment. The new facility outfitting program provides critical support to the DHP's military medical construction program.

**Defense Health Program
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Procurement Budget Item Justification**

APPROPRIATION / BUDGET ACTIVITY : 97*0130

P-1 ITEM NOMENCLATURE: Joint Operational Medicine Information System (JOMIS)

	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
	Actual	Enacted	Request	Estimate	Estimate	Estimate	Estimate
Quantity							
Total Cost (\$ M)	2.620	0.000	1.467	28.913	29.491	30.081	30.682
JOMIS	2.620	0.000	1.467	28.913	29.491	30.081	30.682

REMARKS

The purpose of JOMIS is to modernize, deploy, and sustain the DoD's OpMed Information System (IS) capabilities that enable comprehensive health services to meet Warfighter requirements for military medical operations. JOMIS is intended to function in constrained, intermittent, and non-existent communications environments while providing access to authoritative sources of clinical data.

There are technological and business challenges to the OpMed mission including aged technology, inefficient design standards, overreliance on obsolete code, lack of automation, different deployment methods by Services that impacts standard user adoption, inefficient and overly-bureaucratic acquisition methods, and the lack of unified functional user input. To mitigate these challenges, JOMIS has planned the following actions:

- Translate the Theater Medical Information Requirements (TMIR) IS Capability Development Document (CDD) into a modern Portfolio Capability Roadmap that can be abstracted down to needs statements, personas, and user stories that can inform leading-edge design practices
- Construct program governance that can be achieved through external consultancy and resource investment into an Operational Medicine Functional Champion (OMFC) to create a high achieving team that envisions the future of OpMed capabilities as they are integrated with DoD and Federal medical data landscapes
- Leverage experiential learning on current innovative projects that provide ample opportunities to explore modern software delivery methods that can create and endure software delivery environments that evolve with the OpMed mission
- Take advantage of industry and DoD best practices to evolve and perfect development methods (e.g., Agile and Development Security Operations) which will facilitate the ability to "continuously integrate" and "continuously deliver" capability throughout the software development life cycle

**Defense Health Program
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Procurement Budget Item Justification**

APPROPRIATION / BUDGET ACTIVITY : 97*0130

P-1 ITEM NOMENCLATURE: Military Health System (MHS)
- Desktop to Datacenter (D2D)

	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
	Actual	Enacted	Request	Estimate	Estimate	Estimate	Estimate
Quantity							
Total Cost (\$ M)	70.872	72.302	72.601	74.055	75.536	77.047	78.588
MHS D2D	70.872	72.302	72.601	74.055	75.536	77.047	78.588

REMARKS

Includes resources for upgrades and sustainment of information technology (IT) supporting the DoD's ability to provide and maintain infrastructure and enterprise support services for Military Health System (MHS) centrally managed IT systems in all managed health care regions worldwide.

This includes the following: Seamless integrated wide, local and wireless network allowing health care providers/staff to move from hospital to hospital and authenticate to all IT services without the need of separate accounts; Desktop design standardization across the application, desktop and server environments allowing providers/staff ability to access information between medical facilities; Centrally managed integrated, robust computing infrastructure that provides a standard method to host applications and the ability to use single applications to support health care encounters; Centralized, secure access and authentication capability to network resources that allows providers and staff to all IT services without the need of multiple accounts; Consolidated MHS enterprise IT Service Desk allowing for a single point of contact for all customers regardless of physical location.

Resources will also encompass: Circuits management, Network Service Operations Center (NSOC), Data Center Operations (DCOPS), Video Network Center (VNC), Lifecycle Management (Asset Management Support Services, Enterprise Software Management, and End User Device Management), Performance Planning Management (PPM), and Server Sustainment.

**Defense Health Program
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Procurement Budget Item Justification**

APPROPRIATION / BUDGET ACTIVITY	:	97*0130	P-1 ITEM NOMENCLATURE: Information Technology Development and Sustainment - DoD Healthcare Management System Modernization (DHMSM)						
			FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
			Actual	Enacted	Request	Estimate	Estimate	Estimate	Estimate
Quantity									
Total Cost (\$ M)			232.327	415.114	240.224	15.594	0.000	0.000	0.000
DHMSM			232.327	415.114	240.224	15.594	0.000	0.000	0.000

REMARKS

DHMSM will replace the DoD legacy healthcare management systems with a commercial off-the-shelf capability that is open, modular, and standards-based with non-proprietary interfaces. DHMSM will support the Department's goals of net-centricity by providing a framework for full human and technical connectivity and interoperability that allows DoD users and mission partners to share the information they need, when they need it, in a form they can understand and act on with confidence, and protects information from those who should not have it. Once fielded, the Electronic Health Record (EHR) will support the following healthcare activities for DoD's practitioners and beneficiaries:

- Clinical workflow and provider clinical decision support;
- Capture, maintain, use, protect, preserve and share health data and information;
- Retrieval and presentation of health data and information that is meaningful for EHR users regardless of where the patient's records are physically maintained; and
- Analysis and management of health information from multiple perspectives to include population health, military medical readiness, clinical quality, disease management, and medical research.

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**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2023 President's Budget**

RDT&E Programs

Appropriation: RDT&E, Defense Health Program (\$s M)

Date: March 2022

<u>R-I Line</u>	<u>Program Element</u>	<u>Budget Activity</u>	<u>FY 2021 Actual</u>	<u>FY 2022 Enacted</u>	<u>FY 2023 Estimates</u>	<u>FY 2024 Estimates</u>	<u>FY 2025 Estimates</u>	<u>FY 2026 Estimates</u>	<u>FY 2027 Estimates</u>	
<u>Item No</u>	<u>Number</u>	<u>Item</u>								
1	0601117	Basic Operational Medical Research Sciences	2	8,913	9,091	39,568	40,121	41,210	41,436	41,633
2	0602115	Applied Biomedical Technology	2	72,573	84,024	174,009	161,901	171,340	174,319	175,923
3	0602787	Medical Technology (AFRRI)	2	1,411	1,439	1,468	1,497	1,527	1,557	1,587
4	0603002	Medical Advanced Technology (AFRRI)	2	352	359	366	373	380	388	396
5	0603115	Medical Technology Development	2	1,994,150	2,193,397	320,496	326,420	328,099	332,660	338,070
6	0604110	Medical Products Support and Advanced Concept Development	2	149,831	176,860	166,960	172,289	175,432	179,073	182,384
7	0605013	Information Technology Development	2	16,344	10,866	9,834	10,033	10,234	10,259	10,464
8	0605026	Information Technology Development - DoD Healthcare Management System Modernization (DHMSM)	2	18,336	15,751	12,024	12,264	6,144	6,038	5,141
9	0605045	Joint Operational Medicine Information System (JOMIS)	2	46,214	52,948	18,082	18,731	21,984	23,014	24,273
10	0605145	Medical Products and Support Systems Development	2	21,068	21,489	64,030	58,562	57,895	62,193	63,048
11	0605039	DoD Medical Information Exchange and Interoperability	2	-	-	-	-	-	-	-
12	0606105	Medical Program-Wide Activities	2	48,672	49,645	85,186	86,870	88,109	88,908	90,334
13	0607100	Medical Products and Capabilities Enhancement Activities	2	17,215	17,619	17,971	18,330	18,697	19,071	19,452
		Total Budget Activity 2		2,395,079	2,633,488	909,994	907,392	921,049	938,916	952,705
15	0308604	DoD Medical Information Exchange and Interoperability (DMIX) / Enterprise Intelligence and Data Solutions (EIDS)	8	-	-	137,356	136,357	144,545	111,305	124,018
		Total Budget Activity 8		-	-	137,356	136,357	144,545	111,305	124,018

R-1 Exhibit
DHP

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Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130: <i>Defense Health Program I BA 2: RDT&E</i>	R-1 Program Element (Number/Name) PE 0601117DHA / <i>Basic Operational Medical Research Sciences</i>
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
Total Program Element	74.639	8.913	25.090	39.568	0.000	39.568	40.121	41.210	41.436	41.633	Continuing	Continuing
100A: <i>Congressional Special Interests</i>	0.000	0.000	15.999	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
371: <i>GDF - Basic Operational Medical Research Science</i>	51.415	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
371A: <i>GDF - BOMRS (Combat Casualty Care)</i>	23.224	1.304	1.328	1.356	0.000	1.356	1.381	1.410	1.437	1.466	Continuing	Continuing
371B: <i>GDF - BOMRS (Military Operational Medicine)</i>	0.000	5.498	5.609	5.720	0.000	5.720	5.836	5.953	6.072	6.193	Continuing	Continuing
371E: <i>GDF - BOMRS (Military Infectious Disease)</i>	0.000	2.111	2.154	2.197	0.000	2.197	2.241	2.285	2.331	2.378	Continuing	Continuing
371F: <i>GDF - BOMRS (Defense Research Sciences)</i>	0.000	0.000	0.000	30.295	0.000	30.295	30.663	31.562	31.596	31.596	Continuing	Continuing

Note

n/a

A. Mission Description and Budget Item Justification

Guidance for Development of the Force (GDF) -Basic Medical Research Sciences: This program element (PE) provides support for basic medical research directed toward greater knowledge and understanding of the fundamental principles of science and medicine that are relevant to the improvement of Force Health. Research in this PE is designed to address areas of interest to the Secretary of Defense regarding Service Member Health, capabilities identified through the Joint Capabilities Integration and Development System, and sustainment of DoD and multi-agency priority investments in science, technology, research, and development. GDF basic research (PE 0601117) program development and execution is peer-reviewed and coordinated with all of the Military Services, appropriate Defense agencies or activities and other federal agencies, to include the Department of Veterans Affairs, and the Department of Health and Human Services. Funds in this PE are for basic research that promises to provide important new approaches to complex military medical problems. As the research efforts mature, the most promising efforts will transition to applied research (PE 0602115) or technology development (PE 0603115) funding.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130: <i>Defense Health Program I BA 2: RDT&E</i>	R-1 Program Element (Number/Name) PE 0601117DHA I <i>Basic Operational Medical Research Sciences</i>
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B. Program Change Summary (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Previous President's Budget	8.913	9.091	39.568	0.000	39.568
Current President's Budget	8.913	25.090	39.568	0.000	39.568
Total Adjustments	0.000	15.999	0.000	0.000	0.000
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	15.999			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			

Congressional Add Details (\$ in Millions, and Includes General Reductions)

Project: 100A: *Congressional Special Interests*

Congressional Add: *GDF - Restore Core Research Funding Reduction*

Congressional Add Subtotals for Project: 100A

Project: 371F: *GDF - BOMRS (Defense Research Sciences)*

Congressional Add: *Add input*

Congressional Add Subtotals for Project: 371F

Congressional Add Totals for all Projects

	FY 2021	FY 2022
	-	15.999
	-	15.999
	0.000	0.000
	0.000	0.000
	0.000	15.999

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0601117DHA / <i>Basic Operational Medical Research Sciences</i>	Project (Number/Name) 100A / <i>Congressional Special Interests</i>
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
100A: <i>Congressional Special Interests</i>	0.000	0.000	15.999	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

A. Mission Description and Budget Item Justification

This is program increase due to GDF restoral in the FY22 enacted budget.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: GDF - Restore Core Research Funding Reduction	0.000	-	-	-	-
Accomplishments/Planned Programs Subtotals	0.000	-	-	-	-
	FY 2021	FY 2022			
Congressional Add: GDF - Restore Core Research Funding Reduction	-	15.999			
FY 2022 Plans: This is a program increase due to GDF restoral in the FY22 enacted budget.					
Congressional Adds Subtotals	-	15.999			

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0601117DHA / <i>Basic Operational Medical Research Sciences</i>				Project (Number/Name) 371 / <i>GDF - Basic Operational Medical Research Science</i>			
COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
<i>371: GDF - Basic Operational Medical Research Science</i>	51.415	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

A. Mission Description and Budget Item Justification

Basic research described here focuses on enhancement of knowledge to support capabilities identified through the Joint Capabilities Integration and Development System process and sustainment of DoD and multi-agency priority investments in science, technology, research, and development as stated in the National Defense Strategy, the National Research Action Plan for Improving Access to Mental Health Services for Veterans, Service Members, and Military Families, and the National Strategy for Combating Antibiotic Resistance. This project supports basic research in the following areas:

- Military Infectious Diseases basic research supports development of protection and treatment products for military relevant emerging infectious diseases.
- Military Operational Medicine basic research efforts seek to develop medical countermeasures against operational stressors, prevent musculoskeletal, neurosensory, and psychological injuries during training and operations, and to maximize health, performance and readiness of Service Members.
- Combat Casualty Care efforts are focused on optimizing survival and recovery of injured Service Members across the spectrum of care from point of injury through en route and facility care.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Project 371 GDF – Basic Operational Medical Research Sciences	0.000	-	-	-	-
Description: Provide support for basic medical research directed toward attaining greater knowledge and understanding of fundamental principles of science and medicine relevant to the improvement of medical care in operationally relevant environments.					
Accomplishments/Planned Programs Subtotals	0.000	-	-	-	-

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency										Date: March 2022		
Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0601117DHA / <i>Basic Operational Medical Research Sciences</i>				Project (Number/Name) 371A / <i>GDF - BOMRS (Combat Casualty Care)</i>			
COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
371A: <i>GDF - BOMRS (Combat Casualty Care)</i>	23.224	1.304	1.328	1.356	0.000	1.356	1.381	1.410	1.437	1.466	Continuing	Continuing

A. Mission Description and Budget Item Justification

Basic research described here focuses on the enhancement of knowledge to support capabilities identified through the Joint Capabilities Integration Development System process and sustainment of DoD and multi-agency priority investments in science, technology, research and development. This project supports combat casualty care basic research with the goal of optimizing Warfighter survival and recovery from combat-related injury in current and future operational scenarios by driving medical innovation through development of knowledge and materiel solutions for the acute and early management of combat-related trauma, including point of injury, en route, and facility-based care.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Combat Casualty Care	1.304	1.328	1.356	0.000	1.356
Description: Combat Casualty Care basic research activities are focused on pre-hospital tactical combat casualty care (TCCC) toward improved Warfighter survival of casualties with potentially survivable wounds.					
FY 2022 Plans: Conduct combat casualty care-relevant basic research focused on pre-hospital tactical combat casualty care (TCCC), such as defining biological and pathophysiological mechanisms of the acute effects of trauma including that of life threatening external, junctional (arm pit and groin), and internal (abdomen and chest) bleeding; abnormal blood clotting due to excessive blood loss; and compromised breathing due trauma to the thorax or airways.					
FY 2023 Base Plans: Will continue to conduct combat casualty care-relevant basic research focused on TCCC, such as defining biological and pathophysiological mechanisms of the acute effects of trauma including that of life threatening external, junctional (arm pit and groin), and internal (abdomen and chest) bleeding; abnormal blood clotting due to excessive blood loss; and compromised breathing due trauma to the thorax or airways.					
FY 2023 OCO Plans: N/A					
FY 2022 to FY 2023 Increase/Decrease Statement:					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0601117DHA / <i>Basic Operational Medical Research Sciences</i>	Project (Number/Name) 371A / <i>GDF - BOMRS (Combat Casualty Care)</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Funding change reflects planned lifecycle of this effort. Increase due to inflation.					
Accomplishments/Planned Programs Subtotals	1.304	1.328	1.356	0.000	1.356

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency										Date: March 2022		
Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0601117DHA / <i>Basic Operational Medical Research Sciences</i>				Project (Number/Name) 371B / <i>GDF - BOMRS (Military Operational Medicine)</i>			
COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
371B: <i>GDF - BOMRS (Military Operational Medicine)</i>	0.000	5.498	5.609	5.720	0.000	5.720	5.836	5.953	6.072	6.193	Continuing	Continuing

A. Mission Description and Budget Item Justification

Basic research described here focuses on the enhancement of knowledge to support capabilities identified through the Joint Capabilities Integration Development System process and sustainment of DoD and multi-agency priority investments in science, technology, research and development. This project supports military operational medicine basic research with the goal of maximizing the health, readiness, and performance of Service Members and their families by the development of effective biomedical countermeasures against operational stressors, and prevention and treatment physical and psychological injuries during training and operations.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Military Operational Medicine	5.498	5.609	5.720	0.000	5.720
Description: Military Operational Medicine basic research efforts are focused on increasing fundamental knowledge and understanding to support the development of medical countermeasures in the areas of: musculoskeletal injury prevention and treatment; blunt, blast, accelerative and neurosensory injury; psychological health and resilience; performance in extreme environments; and optimized cognition and fatigue mitigation.					
FY 2022 Plans: Conduct basic research in military operational medicine-relevant areas to include injury prevention and recovery related to blunt, blast, and accelerative injuries, optimized cognition and fatigue management, physiological health and resilience related to musculoskeletal injuries, and performance in extreme environments.					
FY 2023 Base Plans: Continue to conduct basic research with focus on injury prevention and recovery related to blunt, blast, and accelerative injuries; injury prevention and recovery related to musculoskeletal injury; performance nutrition and weight balance; operational systems toxicology for environmental health hazards; and, fatigue, cognitive health and performance.					
FY 2023 OCO Plans: N/A					
FY 2022 to FY 2023 Increase/Decrease Statement:					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0601117DHA / <i>Basic Operational Medical Research Sciences</i>	Project (Number/Name) 371B / <i>GDF - BOMRS (Military Operational Medicine)</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Increase is due to inflation.					
Accomplishments/Planned Programs Subtotals	5.498	5.609	5.720	0.000	5.720

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

n/a

D. Acquisition Strategy

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0601117DHA / <i>Basic Operational Medical Research Sciences</i>	Project (Number/Name) 371E / <i>GDF - BOMRS (Military Infectious Disease)</i>
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
371E: <i>GDF - BOMRS (Military Infectious Disease)</i>	0.000	2.111	2.154	2.197	0.000	2.197	2.241	2.285	2.331	2.378	Continuing	Continuing

A. Mission Description and Budget Item Justification

Basic research described here focuses on the enhancement of knowledge to support capabilities identified through the Joint Capabilities Integration Development System process and sustainment of DoD and multi-agency priority investments in science, technology, research and development. This project supports military infectious diseases basic research toward the goal of preventing and treating infectious disease threats to eliminate their impacts on operational readiness.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Military Infectious Diseases	2.111	2.154	2.197	0.000	2.197
Description: Military infectious diseases basic research activities support efforts in military relevant emerging infectious diseases threats.					
FY 2022 Plans: Conduct basic research in emerging infectious diseases to respond to new and emerging infectious diseases threats and accelerate promising, innovative countermeasures.					
FY 2023 Base Plans: Will continue to conduct basic research in emerging infectious diseases to respond to new and emerging infectious diseases threats and accelerate promising, innovative countermeasures.					
FY 2023 OCO Plans: N/A					
FY 2022 to FY 2023 Increase/Decrease Statement: Increase due to inflation.					
Accomplishments/Planned Programs Subtotals	2.111	2.154	2.197	0.000	2.197

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

n/a

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0601117DHA / <i>Basic Operational Medical Research Sciences</i>	Project (Number/Name) 371E / <i>GDF - BOMRS (Military Infectious Disease)</i>

D. Acquisition Strategy
N/A

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0601117DHA / <i>Basic Operational Medical Research Sciences</i>				Project (Number/Name) 371F / <i>GDF - BOMRS (Defense Research Sciences)</i>			
COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
371F: <i>GDF - BOMRS (Defense Research Sciences)</i>	0.000	0.000	0.000	30.295	0.000	30.295	30.663	31.562	31.596	31.596	Continuing	Continuing

A. Mission Description and Budget Item Justification

Funding and mission realignment of US Army Medical Research and Development Command transfer to the Defense Health Agency in order to meet Congressional intent as outlined in NDAA 2019 (Section 711) and NDAA 2020 (Section 737) in support of Defense Research Sciences.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: GDF - BOMRS (Defense Research Sciences)	0.000	0.000	30.295	0.000	30.295
Description: Programmatic transfer in accordance with the 711/737 US Army Medical Research and Development Command transfer to Defense Health Agency in support of Defense Research Sciences from Army PE 0601102A.					
FY 2022 Plans: N/A					
FY 2023 Base Plans: Efforts will focus on Basic Research in support of medical problems related to infectious diseases, operational medicine and combat care.					
FY 2023 OCO Plans: N/A					
FY 2022 to FY 2023 Increase/Decrease Statement: Funding increase for this Project was due to transfer/realignment from Army.					
Accomplishments/Planned Programs Subtotals	0.000	0.000	30.295	0.000	30.295
	FY 2021	FY 2022			
Congressional Add: Add input	0.000	0.000			
FY 2021 Accomplishments: Add input					
FY 2022 Plans: Add input					
Congressional Adds Subtotals	0.000	0.000			

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0601117DHA / <i>Basic Operational Medical Research Sciences</i>	Project (Number/Name) 371F / <i>GDF - BOMRS (Defense Research Sciences)</i>

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity **R-1 Program Element (Number/Name)**
 0130: *Defense Health Program I BA 2: RDT&E* PE 0602115DHA I *Applied Biomedical Technology*

COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
Total Program Element	494.078	72.573	162.745	174.009	0.000	174.009	161.901	171.340	174.319	175.923	Continuing	Continuing
200A: <i>Congressional Special Interests</i>	0.000	0.000	88.721	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
216: <i>Anomalous Health Incidents (AHI)</i>	0.000	0.000	0.000	15.000	0.000	15.000	0.000	0.000	0.000	0.000	Continuing	Continuing
246A: <i>Combating Antibiotic Resistant Bacteria (CARB) - WRAIR Discovery and Wound Program (Army)</i>	11.824	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
306B: <i>Advanced Diagnostics & Therapeutics Research & Development (AF)</i>	20.113	0.151	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
306D: <i>Biomedical Impact and Readiness Optimization of Air & Space Operations (AF)</i>	6.080	4.064	4.299	4.385	0.000	4.385	4.473	4.567	4.658	4.751	Continuing	Continuing
372: <i>GDF - Applied Biomedical Technology</i>	399.163	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
372A: <i>GDF - ABT (Combat Casualty Care)</i>	0.000	14.855	15.151	17.459	0.000	17.459	18.789	19.125	19.468	19.817	Continuing	Continuing
372B: <i>GDF - ABT (Military Operational Medicine)</i>	0.000	26.255	26.779	34.706	0.000	34.706	35.357	36.061	36.785	37.523	Continuing	Continuing
372C: <i>GDF - ABT (Medical Simulation & Training/Health Informatics)</i>	0.000	10.611	10.826	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
372D: <i>GDF - ABT (Clinical and Rehabilitation Medicine)</i>	0.000	7.064	7.204	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
372E: <i>GDF - ABT (Military Infectious Disease)</i>	0.000	8.607	8.779	18.995	0.000	18.995	18.396	18.804	19.220	19.644	Continuing	Continuing
372F: <i>GDF - ABT (Radiological Health Effects)</i>	0.000	0.966	0.986	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Defense Health Agency										Date: March 2022		
Appropriation/Budget Activity 0130: <i>Defense Health Program I BA 2: RDT&E</i>					R-1 Program Element (Number/Name) PE 0602115DHA I <i>Applied Biomedical Technology</i>							
372G: <i>GDF - ABT (Medical Technology)</i>	0.000	0.000	0.000	83.464	0.000	83.464	84.886	92.783	94.188	94.188	Continuing	Continuing
447A: <i>Military HIV Research Program (Army)</i>	56.898	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

A. Mission Description and Budget Item Justification

This program element (PE) provides applied research funding to refine concepts and ideas into potential solutions for military health and performance problems, with a view toward evaluating technical feasibility. Research in this PE is designed to address areas of interest to the Secretary of Defense regarding Wounded Warriors, capabilities identified through the Joint Capabilities Integration and Development System, and sustainment of DoD and multi-agency priority investments in science, technology, research, and development. Medical research, development, test, and evaluation (RDT&E) priorities for the Defense Health Program (DHP) are guided by, and will support, the National Defense Strategy, the National Research Action Plan for Improving Access to Mental Health Services for Veterans, Service Members, Military Families, the National Strategy for Combating Antibiotic Resistance, and the National Strategy for Biodefense.

Program development and execution is peer-reviewed and coordinated with all of the Military Services, appropriate Defense agencies or activities and other federal agencies, to include the Department of Veterans Affairs and, the Department of Health and Human Services. Funds in the PE support studies and investigations leading to candidate solutions that may involve use of animal models for testing in preparation for initial human testing. As research efforts mature, the most promising efforts will transition to technology development (PE 0603115) funding.

B. Program Change Summary (\$ in Millions)

	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023 Base</u>	<u>FY 2023 OCO</u>	<u>FY 2023 Total</u>
Previous President's Budget	72.573	74.024	174.009	0.000	174.009
Current President's Budget	72.573	162.745	174.009	0.000	174.009
Total Adjustments	0.000	88.721	0.000	0.000	0.000
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	88.721			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			

Congressional Add Details (\$ in Millions, and Includes General Reductions)

Project: 200A: *Congressional Special Interests*

Congressional Add: 462 - *GDF - Restore Core Research Funding Reduction*

Congressional Add: 200A - *Armed Forces Institute of Regenerative Medicine III*

	<u>FY 2021</u>	<u>FY 2022</u>
	-	78.721
	-	10.000

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Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Defense Health Agency	Date: March 2022
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Appropriation/Budget Activity 0130: <i>Defense Health Program I BA 2: RDT&E</i>	R-1 Program Element (Number/Name) PE 0602115DHA I <i>Applied Biomedical Technology</i>
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Congressional Add Details (\$ in Millions, and Includes General Reductions)	FY 2021	FY 2022
Congressional Add Subtotals for Project: 200A	-	88.721
Project: 216: <i>Anomalous Health Incidents (AHI)</i> Congressional Add: <i>Anomalous Health Incidents (AHI)</i>	0.000	0.000
Congressional Add Subtotals for Project: 216	0.000	0.000
Project: 372G: <i>GDF - ABT (Medical Technology)</i> Congressional Add: <i>Add input</i>	0.000	0.000
Congressional Add Subtotals for Project: 372G	0.000	0.000
Congressional Add Totals for all Projects	0.000	88.721

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0602115DHA / <i>Applied Biomedical Technology</i>	Project (Number/Name) 200A / <i>Congressional Special Interests</i>
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
200A: <i>Congressional Special Interests</i>	0.000	0.000	88.721	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

A. Mission Description and Budget Item Justification

This is a program increase due to GDF restoral in the FY22 enacted budget.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022
<i>Congressional Add:</i> 462 - GDF - Restore Core Research Funding Reduction	-	78.721
<i>FY 2022 Plans:</i> This is a program increase due to GDF restoral in the FY22 enacted budget.		
<i>Congressional Add:</i> 200A - Armed Forces Institute of Regenerative Medicine III	-	10.000
<i>FY 2022 Plans:</i> Congressional Add		
Congressional Adds Subtotals	-	88.721

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0602115DHA / <i>Applied Biomedical Technology</i>				Project (Number/Name) 216 / <i>Anomalous Health Incidents (AHI)</i>			
COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
216: <i>Anomalous Health Incidents (AHI)</i>	0.000	0.000	0.000	15.000	0.000	15.000	0.000	0.000	0.000	0.000	Continuing	Continuing

A. Mission Description and Budget Item Justification

Add input

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Anomalous Health Incidents (AHI)	0.000	0.000	15.000	0.000	15.000
Description: Add input					
FY 2022 Plans: Add input					
FY 2023 Base Plans: Add input					
FY 2023 OCO Plans: Add input					
FY 2022 to FY 2023 Increase/Decrease Statement: Add input					
Accomplishments/Planned Programs Subtotals	0.000	0.000	15.000	0.000	15.000
	FY 2021	FY 2022			
Congressional Add: Anomalous Health Incidents (AHI)	0.000	0.000			
FY 2021 Accomplishments: Add input					
FY 2022 Plans: Add input					
Congressional Adds Subtotals	0.000	0.000			

C. Other Program Funding Summary (\$ in Millions)

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0602115DHA / <i>Applied Biomedical Technology</i>	Project (Number/Name) 216 / <i>Anomalous Health Incidents (AHI)</i>

C. Other Program Funding Summary (\$ in Millions)

Remarks

D. Acquisition Strategy

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0602115DHA / <i>Applied Biomedical Technology</i>	Project (Number/Name) 246A / <i>Combating Antibiotic Resistant Bacteria (CARB) - WRAIR Discovery and Wound Program (Army)</i>
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
246A: <i>Combating Antibiotic Resistant Bacteria (CARB) - WRAIR Discovery and Wound Program (Army)</i>	11.824	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

A. Mission Description and Budget Item Justification

At the President’s direction in late 2013, a National Strategy was created to address the critical issue of antimicrobial resistance. This strategy was devised using an interagency approach and ultimately approved at the executive level (2014). Inherent in this work are DoD sponsored efforts to support the DoD’s beneficiaries, but also complement national efforts to prevent, detect, and control illness and death related to infections caused by antibiotic-resistant bacteria. One critical need identified is for new therapeutics, to include antibiotics. This effort’s focus is on the development of new/novel antibiotics, especially those targeting the most resistant and worrisome Gram negative bacterial pathogens, using existing expertise at the Walter Reed Army Institute of Research (WRAIR), and leveraging other WRAIR capabilities to evaluate viable candidate targets for advanced discovery. This project supports (both directly and indirectly) Global Health Security Agenda priorities to respond rapidly and effectively to biological threats of international concern.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Combating Antibiotic Resistant Bacteria (CARB) - WRAIR Discovery and Wound Program (Army)	0.000	-	-	-	-
Description: Focus on continued establishment of in-house capabilities for an antibacterial drug discovery program directed toward military relevant drug-resistant bacteria that a) encompasses assessment of external products/candidates/leads that may meet DoD requirements, b) opens active intramural based discovery efforts of new potential products/candidates/leads for development, and c) fosters partnerships with external collaborators to develop/co-develop new potential antibacterial treatment therapeutics.					
Accomplishments/Planned Programs Subtotals	0.000	-	-	-	-

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

D. Acquisition Strategy

An Acquisition Strategy will be developed to support future Milestone B when a clinical development candidate is identified and reaches Technology Readiness Level (TRL)-6.

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0602115DHA / <i>Applied Biomedical Technology</i>	Project (Number/Name) 306B / <i>Advanced Diagnostics & Therapeutics Research & Development (AF)</i>
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
306B: <i>Advanced Diagnostics & Therapeutics Research & Development (AF)</i>	20.113	0.151	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

A. Mission Description and Budget Item Justification

This project provides applied research funding needed to increase efficiency and efficacy of care across the spectrum of Advanced Diagnostics and Therapeutics requirements to improve and enhance clinical Diagnosis, Identification, Quantification and Mitigation (DIQM) methods, technique protocols, guidelines and practices for all Department of Defense (DoD) wounded, ill, and/or injured beneficiaries.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Advanced Diagnostics & Therapeutics Research & Development (AF)	0.151	-	-	-	-
Description: This project provides applied research funding needed to perform research in the area of diagnostic assay development / refinement for diseases of operational significance. Project funds seek to promote 'omic'-informed personalized medicine with an emphasis on targeted prevention, diagnosis, and treatment. The delivery of pro-active, evidence-based, personalized medicine will improve health in Warfighters and beneficiaries by providing care that is specific to the situation and patient, to include preventing disease or injury, early and accurate diagnosis, and selection of appropriate and effective treatment. Personalized medicine will reduce morbidity, mortality, mission impact of illness / injury, and healthcare costs while increasing health and wellness of the AF population and efficiency of the healthcare system. This applied research supports multiple focus areas, each of which represents an identified barrier / gap which must be addressed for successful implementation of 'omic'-informed personalized medicine.					
Accomplishments/Planned Programs Subtotals	0.151	-	-	-	-

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks
Accomplishments: Mesenchymal Stem Cell (MSC)-derived exosomes were examined as modulators of 1) peripheral nerve regeneration and 2) repair from radiofrequency-induced auditory dysfunction. Raman microscopy was evaluated for the rapid detection of microbial water contamination.

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0602115DHA / <i>Applied Biomedical Technology</i>	Project (Number/Name) 306B / <i>Advanced Diagnostics & Therapeutics Research & Development (AF)</i>

D. Acquisition Strategy

Broad Area Announcements (BAA) and Intramural calls for proposals are used to award initiatives in this project following determinations of scientific and technical merit, validation of need, prioritization, selection and any necessary legal and / or regulatory approvals (IRB, etc.).

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency										Date: March 2022		
Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0602115DHA / <i>Applied Biomedical Technology</i>				Project (Number/Name) 306D / <i>Biomedical Impact and Readiness Optimization of Air & Space Operations (AF)</i>			
COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
306D: <i>Biomedical Impact and Readiness Optimization of Air & Space Operations (AF)</i>	6.080	4.064	4.299	4.385	0.000	4.385	4.473	4.567	4.658	4.751	Continuing	Continuing

A. Mission Description and Budget Item Justification

This project provides applied research to define and develop medical attribute-linked solutions to better address Air Force operational readiness and mission effectiveness. This research develops approaches aimed at increasing the understanding of full spectrum factors impacting health and performance across Air Force operating environments, to include critical Air Force-supported mission areas of air and space superiority, aeromedical evacuation, communications and intelligence systems, global information operations, reconnaissance and electronic-combat aircraft. Includes research in operationally relevant Air and Space environments pertaining to: in Biomedical Impact of Air and Space, Biotechnology for Health and Performance, Cognitive and Physiological Performance, and Health and Performance Sensing and Assessment.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Biomedical Impact and Readiness Optimization of Air & Space Operations (AF)	4.064	4.299	4.385	0.000	4.385
Description: Applied research to develop approaches to increase the understanding of the underlying medical and biological mechanisms of health in operating environments that link to optimizing mission performance and readiness. Research will identify metrics of cognitive, behavioral, physiological, sensory and motor attributes. This will shape medically relevant screening, risk-assessment, retention and return-to-duty criteria through data driven risk analysis and mitigation actions, and enhance the delivery of Air Force operational care.					
FY 2022 Plans: Develop models of health and performance relevant to Air Force operational environments using attribute-linked data to assess and mitigate risks impacting mission readiness. Continue to characterize relevant biomarkers, chemical, environmental and medical attributes that optimize mission performance. Continue to evaluate enroute care relevant safety issues and patient outcomes. Understand health impact of arctic operations.					
FY 2023 Base Plans: Enhance knowledge base regarding medical equipment performance in CREMO environment. Enhance medical understanding for cognitive sustainment of airman and guardians. Further evaluation of genetic predisposition to hypoxia induced cognitive decrement.					
FY 2023 OCO Plans:					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0602115DHA / <i>Applied Biomedical Technology</i>	Project (Number/Name) 306D / <i>Biomedical Impact and Readiness Optimization of Air & Space Operations (AF)</i>
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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
N/A					
<i>FY 2022 to FY 2023 Increase/Decrease Statement:</i> Increased funding due to realignment within Defense Health Program, Research, Development, Test and Evaluation (DHP RDT&E), Program Element (PE) 0602115DHA, from Project Codes 306B to 306D reflect deliberate focus on future readiness mission.					
Accomplishments/Planned Programs Subtotals	4.064	4.299	4.385	0.000	4.385

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

Accomplishments: COVID-19 and viral detection within operational spaces, parametric high fidelity whole body human injury computational modeling, identification of operational vibration health risk mechanisms and mitigation strategies, quantified attributes associated with adaptations to stressors of high performance flight, and catalog the neural time course to recovery from hypoxic exposure.

D. Acquisition Strategy

Air Force Contracting, Interagency Agreements, and Inter-service Support Agreements with the U.S. Army, U.S. Navy, and the Department of Homeland Security are used to support ongoing scientific and technical efforts within this program. These agreements are supplemented with Broad Area Announcements (BAA) and Intramural calls for proposals, which are used to award initiatives in this project following determinations of scientific and technical merit, validation of need, prioritization, selection and any necessary legal and / or regulatory approvals (IRB, etc.).

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0602115DHA / <i>Applied Biomedical Technology</i>				Project (Number/Name) 372 / <i>GDF - Applied Biomedical Technology</i>			
COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
372: <i>GDF - Applied Biomedical Technology</i>	399.163	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

A. Mission Description and Budget Item Justification

Guidance for Development of the Force - Applied Biomedical Technology: Applied biomedical technology research will focus on refining concepts and ideas into potential solutions for military problems and conducting analyses of alternatives to select the best potential solution for further advanced technology development. Applied research is managed by the Joint Program Committees in the following areas: 1- Military Infectious Diseases applied research is developing protection and treatment capabilities for military relevant emerging infectious diseases and wound infections. 2- Military Operational Medicine applied research goals are to develop medical countermeasures against operational stressors, prevent and treat musculoskeletal, neurosensory, and psychological injuries during training and operations, and to maximize health, performance and readiness of Service members. 3- Combat Casualty Care applied research is focused on optimizing survival and recovery in injured Service members across the spectrum of care from point of injury through en route and facility care.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: GDF Applied Biomedical Technology	0.000	0.000	0.000	0.000	0.000
Description: Focus is on refining concepts and ideas into potential solutions to military problems and conducting analyses of alternatives to select the best potential solution for further advanced technology development.					
FY 2022 Plans: N/A - \$0					
FY 2023 Base Plans: N/A - \$0					
FY 2023 OCO Plans: N/A - \$0					
FY 2022 to FY 2023 Increase/Decrease Statement: N/A - \$0					
Accomplishments/Planned Programs Subtotals	0.000	0.000	0.000	0.000	0.000

C. Other Program Funding Summary (\$ in Millions)

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0602115DHA / <i>Applied Biomedical Technology</i>	Project (Number/Name) 372 / <i>GDF - Applied Biomedical Technology</i>

C. Other Program Funding Summary (\$ in Millions)

Remarks

D. Acquisition Strategy

Evaluate technical feasibility of potential solutions to military health issues. Implement models into data or knowledge and test in a laboratory environment. Technology Transition and Milestone A packages will be developed to facilitate product transition.

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0602115DHA / <i>Applied Biomedical Technology</i>	Project (Number/Name) 372A / <i>GDF - ABT (Combat Casualty Care)</i>
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
372A: <i>GDF - ABT (Combat Casualty Care)</i>	0.000	14.855	15.151	17.459	0.000	17.459	18.789	19.125	19.468	19.817	Continuing	Continuing

A. Mission Description and Budget Item Justification

This project supports applied research with the goal of optimizing Warfighter survival and recovery from combat-related injury in current and future operational scenarios by driving medical innovation through development of knowledge and materiel solutions for the management of combat-related trauma. Applied biomedical research will focus on refining concepts and ideas into potential solutions for military problems and conducting analysis of alternatives to select the best potential solutions for further advanced technology development.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Joint Battlefield Healthcare (Formerly Combat Casualty Care)	14.855	15.151	17.459	0.000	17.459
Description: Joint Battlefield Healthcare (formerly Combat Casualty Care) applied research activities are focused on care the areas of prolonged field care; pre-hospital tactical combat casualty care; battlefield traumatic brain injury/neurotrauma; and burn injury.					
FY 2022 Plans: Conduct Joint Battlefield Healthcare (formerly Combat Casualty Care) applied research activities focused on establishing preclinical and clinical effects of prolonged care technologies, early interventions for acute traumatic brain injury, and innovative products for resuscitation and immediate stabilization of combat casualties in a scenario of multi-domain operations.					
FY 2023 Base Plans: Will continue Joint Battlefield Healthcare (formerly Combat Casualty Care) applied research activities focused on establishing preclinical and clinical effects of prolonged care technologies, early interventions for acute traumatic brain injury, and innovative products for resuscitation and immediate stabilization of combat casualties in a scenario of multi-domain operations.					
FY 2023 OCO Plans: N/A					
FY 2022 to FY 2023 Increase/Decrease Statement: Funds moved from Project Code 372C to further support Combat Casualty Care applied research efforts.					
Accomplishments/Planned Programs Subtotals	14.855	15.151	17.459	0.000	17.459

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0602115DHA / <i>Applied Biomedical Technology</i>	Project (Number/Name) 372A / <i>GDF - ABT (Combat Casualty Care)</i>

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0602115DHA / <i>Applied Biomedical Technology</i>	Project (Number/Name) 372B / <i>GDF - ABT (Military Operational Medicine)</i>
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
372B: <i>GDF - ABT (Military Operational Medicine)</i>	0.000	26.255	26.779	34.706	0.000	34.706	35.357	36.061	36.785	37.523	Continuing	Continuing

A. Mission Description and Budget Item Justification

This project supports applied research with the goal of maximizing the health, readiness, and performance of Service members and their families by the development of effective biomedical countermeasures against operational stressors, and prevention and treatment physical and psychological injuries during training and operations. Applied biomedical research will focus on refining concepts and ideas into potential solutions for military problems and conducting analysis of alternatives to select the best potential solutions for further advanced technology development.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Military Health and Recovery (Formerly Military Operational Medicine)	26.255	26.779	34.706	0.000	34.706
Description: Studies, investigations, and non-system specific technology effort focus on: injury prevention and recovery; optimized cognition and fatigue management; psychological health and resilience; and performance in extreme environments. Activities will continue to focus on: injury prevention and recovery related to blunt, blast, and accelerative injuries; injury prevention and recovery related to musculoskeletal injury; fatigue, cognitive health and performance; human operator health and performance in complex systems; performance nutrition and weight balance; operational systems toxicology for environmental health hazards; protection and performance sustainment in extreme environments; and optimization of psychological health and resilience.					
FY 2022 Plans: Support efforts focused on: injury prevention and recovery related to blunt, blast, and accelerative injuries, as well as musculoskeletal injury; fatigue, cognitive health and performance; human operator health and performance in complex systems; performance nutrition and weight balance; operational systems toxicology for environmental health hazards; protection and performance sustainment in extreme environments; and optimization of psychological health and resilience.					
FY 2023 Base Plans: Efforts will continue to focus on: injury prevention and recovery related to blunt, blast, and accelerative injuries, as well as musculoskeletal injury; fatigue, cognitive health and performance; human operator health and performance in complex systems; performance nutrition and weight balance; operational systems toxicology					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0602115DHA / <i>Applied Biomedical Technology</i>	Project (Number/Name) 372B / <i>GDF - ABT (Military Operational Medicine)</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
for environmental health hazards; protection and performance sustainment in extreme environments; and optimization of psychological health and resilience. FY 2023 OCO Plans: N/A FY 2022 to FY 2023 Increase/Decrease Statement: Funds moved from Project Code 372D to further support Military Operational Medicine musculoskeletal injury prevention & treatment applied research efforts.					
Accomplishments/Planned Programs Subtotals	26.255	26.779	34.706	0.000	34.706

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency										Date: March 2022		
Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0602115DHA / <i>Applied Biomedical Technology</i>				Project (Number/Name) 372C / <i>GDF - ABT (Medical Simulation & Training/Health Informatics)</i>			
COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
372C: <i>GDF - ABT (Medical Simulation & Training/Health Informatics)</i>	0.000	10.611	10.826	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

A. Mission Description and Budget Item Justification

Conduct studies and experimentation to meet a military medical need. Efforts are directed toward expanding and applying knowledge to develop or improve devices, systems, processes or methods that support medical simulation to increase military medical personnel’s knowledge, skills and abilities to deliver combat casualty care support to manage patient injury and illness and to conduct patient movement from point of injury through role of care four.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Medical Simulation Technologies (Formerly Medical Simulation Technologies & Training/Health Informatics)	10.611	10.826	0.000	0.000	0.000
Description: Studies, investigations, and non-system specific technology efforts focused on tissue models, technologies that simulate medical condition progress over time, technologies that simulate injury, technologies that replicate warfighter bio-physiology, and, technologies that simulate high-fidelity combat casualty care scenarios. Activities will continue to focus on tissue models that accurately simulate the feel, pliability, flexibility, and responsiveness of live tissue; technologies that simulate the degradation or worsening of a medical condition over time, as well as simulate the improvement of a medical condition over time; technologies that simulate injury, especially hemorrhage, fractures, and ocular damage; technologies that accurately reflect warfighter bodily characteristics and are rugged enough to simulate patient care and movement throughout the entire continuum of care; technologies that simulate combat scenarios to provide realistic environments; and, technologies that simulate patient movement through the continuum of care.					
FY 2022 Plans: Conduct studies and experimentation to meet a military medical need. Efforts are directed toward expanding and applying knowledge to develop or improve devices, systems, processes or methods that support medical simulation to increase military medical personnel’s knowledge, skills and abilities to deliver combat casualty care support to manage patient injury and illness and to conduct patient movement from point of injury through role of care four.					
FY 2023 Base Plans:					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0602115DHA / <i>Applied Biomedical Technology</i>	Project (Number/Name) 372C / <i>GDF - ABT (Medical Simulation & Training/Health Informatics)</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Funds moved to Project Codes 372A and 372E to support Combat Casualty Care and Military Infectious Diseases (wound infections) applied research efforts. FY 2023 OCO Plans: N/A FY 2022 to FY 2023 Increase/Decrease Statement: Funding change reflects planned lifecycle of this effort.					
Accomplishments/Planned Programs Subtotals	10.611	10.826	0.000	0.000	0.000

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0602115DHA / <i>Applied Biomedical Technology</i>	Project (Number/Name) 372D / <i>GDF - ABT (Clinical and Rehabilitation Medicine)</i>
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
372D: <i>GDF - ABT (Clinical and Rehabilitation Medicine)</i>	0.000	7.064	7.204	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

A. Mission Description and Budget Item Justification

Clinical and rehabilitative medicine activities for products to transition to technology development in the areas of neuromusculoskeletal injury, pain management, regenerative medicine, and sensory systems.

B. Accomplishments/Planned Programs (\$ in Millions)

Title: Clinical and Rehabilitation Medicine

Description: Applied research in neuromusculoskeletal injuries to advance the diagnosis, treatment and rehabilitation outcomes after Service-related injuries continues to progress. Targets for therapies to alleviate acute, chronic, and battlefield pain. Continue to focus efforts on developing solutions to repair, reconstruct or regenerate tissue lost or damaged due to traumatic injury, as well as, optimize restoration and rehabilitation of hearing and balance.

FY 2022 Plans:

Clinical and rehabilitative medicine activities for products to transition to technology development in the areas of neuromusculoskeletal injury, pain management, regenerative medicine, and sensory systems.

FY 2023 Base Plans:

N/A

FY 2023 OCO Plans:

N/A

FY 2022 to FY 2023 Increase/Decrease Statement:

Funds moved to Project Code 372B to support Military Operational Medicine musculoskeletal injury prevention & treatment applied research efforts.

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
	7.064	7.204	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals	7.064	7.204	0.000	0.000	0.000

C. Other Program Funding Summary (\$ in Millions)

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0602115DHA / <i>Applied Biomedical Technology</i>	Project (Number/Name) 372D / <i>GDF - ABT (Clinical and Rehabilitation Medicine)</i>

C. Other Program Funding Summary (\$ in Millions)

Remarks

D. Acquisition Strategy

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0602115DHA / <i>Applied Biomedical Technology</i>				Project (Number/Name) 372E / <i>GDF - ABT (Military Infectious Disease)</i>			
COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
372E: <i>GDF - ABT (Military Infectious Disease)</i>	0.000	8.607	8.779	18.995	0.000	18.995	18.396	18.804	19.220	19.644	Continuing	Continuing

A. Mission Description and Budget Item Justification

This project supports applied research toward the goal of preventing and treating infectious disease threats to eliminate their impacts on operational readiness. Applied biomedical research will focus on refining concepts and ideas into potential solutions for military problems and conducting analysis of alternatives to select the best potential solutions for further advanced technology development.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Military Infectious Diseases	8.607	8.779	18.995	0.000	18.995
Description: Multi-year studies in wound infections continue to address the ability to predict infection and better treatment options for infections with multidrug-resistant (MDR) bacterial pathogens. Novel and innovative therapeutics and delivery technologies for combat wounds.					
FY 2022 Plans: Identify and optimize lead drug compounds to identify emerging infectious diseases (EID) countermeasure candidates for human studies. Test lead drug candidates for safety and toxicity in animals. Down-select lead candidates as an EID drug for use in humans. Optimize antigens and platforms for use in animal studies. Evaluate new immunoprophylactic candidates for safety, effectiveness, and immunogenicity in animal models to advance to human clinical trials. Optimize and test of antigens and vaccine platforms for Dengue. Demonstrate efficacy and safety of dengue vaccine candidates in animal models. Support wound infections prevention and treatment applied medical research.					
FY 2023 Base Plans: Will continue to support wound infections and EID countermeasures development.					
FY 2023 OCO Plans: N/A					
FY 2022 to FY 2023 Increase/Decrease Statement: Funds moved from Project Code 372C to support wound infections applied research efforts.					
Accomplishments/Planned Programs Subtotals	8.607	8.779	18.995	0.000	18.995

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0602115DHA / <i>Applied Biomedical Technology</i>	Project (Number/Name) 372E / <i>GDF - ABT (Military Infectious Disease)</i>

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0602115DHA / <i>Applied Biomedical Technology</i>				Project (Number/Name) 372F / <i>GDF - ABT (Radiological Health Effects)</i>			
COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
372F: <i>GDF - ABT (Radiological Health Effects)</i>	0.000	0.966	0.986	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

A. Mission Description and Budget Item Justification

This project supports applied research with the goal of pursuing the development of Food and Drug Administration (FDA) approved drugs, biologicals, and diagnostics (e.g., biodosimetry) to increase survival and decrease incapacity after acute radiation exposures.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Radiological Health Effects	0.966	0.986	0.000	0.000	0.000
Description: Research will support discovery of one to two Medical Countermeasures (MCMs) candidates to development toward Technology Readiness Level 6 (TRL-6) in support of transition to the advanced developer. In addition to identifying MCM candidates, this research will provide a fundamental understanding of the effects of radiation exposure. MCM identification will also be supported by the development and characterization on animal models to support FDA compliance, and also the identification and characterization of biomarkers to identify druggable targets and to support characterization of the mechanism of action of candidate MCMs					
FY 2022 Plans: Continue research toward the development of prophylactic medical countermeasures against acute radiation exposures and supporting mechanistic science and animal development.					
FY 2023 Base Plans: N/A					
FY 2023 OCO Plans: N/A					
FY 2022 to FY 2023 Increase/Decrease Statement: Radiation Health Effects has been moved under Combat Casualty Care.					
Accomplishments/Planned Programs Subtotals	0.966	0.986	0.000	0.000	0.000

C. Other Program Funding Summary (\$ in Millions)

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0602115DHA / <i>Applied Biomedical Technology</i>	Project (Number/Name) 372F / <i>GDF - ABT (Radiological Health Effects)</i>

C. Other Program Funding Summary (\$ in Millions)

Remarks

D. Acquisition Strategy

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0602115DHA / <i>Applied Biomedical Technology</i>	Project (Number/Name) 372G / <i>GDF - ABT (Medical Technology)</i>
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
372G: <i>GDF - ABT (Medical Technology)</i>	0.000	0.000	0.000	83.464	0.000	83.464	84.886	92.783	94.188	94.188	Continuing	Continuing

A. Mission Description and Budget Item Justification

Funding and mission realignment of US Army Medical Research and Development Command transfer to the Defense Health Agency in order to meet Congressional intent as outlined in NDAA 2019 (Section 711) and NDAA 2020 (Section 737) in support of Medical & Biomedical Technology.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: GDF - ABT (Biomedical Technology)	0.000	0.000	83.464	0.000	83.464
Description: Programmatic transfer in accordance with the 711/737 US Army Medical Research and Development Command transfer to Defense Health Agency in support of Medical Technology from Army PEs 0602115A & 0602787A.					
FY 2022 Plans: N/A					
FY 2023 Base Plans: Efforts will focus on Applied Research in support of Medical Technology.					
FY 2023 OCO Plans: N/A					
FY 2022 to FY 2023 Increase/Decrease Statement: Funding increase for this Project was due to transfer/realignment from Army.					
Accomplishments/Planned Programs Subtotals	0.000	0.000	83.464	0.000	83.464
	FY 2021	FY 2022			
Congressional Add: Add input	0.000	0.000			
FY 2021 Accomplishments: N/A					
FY 2022 Plans: N/A					
Congressional Adds Subtotals	0.000	0.000			

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0602115DHA / <i>Applied Biomedical Technology</i>	Project (Number/Name) 372G / <i>GDF - ABT (Medical Technology)</i>

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0602115DHA / <i>Applied Biomedical Technology</i>	Project (Number/Name) 447A / <i>Military HIV Research Program (Army)</i>
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
447A: <i>Military HIV Research Program (Army)</i>	56.898	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

A. Mission Description and Budget Item Justification

This project conducts research on the human immunodeficiency virus (HIV), which causes acquired immunodeficiency syndrome (AIDS). This effort supports the Administration's priorities in the area of international scientific partnership in global health engagement. Work in this area includes refining improved identification methods to determine genetic diversity of the virus and evaluating and preparing overseas sites for clinical trials with global vaccine candidates. Additional activities include refining candidate vaccines for preventing HIV and undertaking preclinical studies (studies required before testing in humans) to assess vaccine for potential to protect and/or manage the disease in infected individuals. This project is jointly managed through an Interagency Agreement between U.S. Army Medical Research and Materiel Command (USAMRMC) and the National Institute of Allergy and Infectious Diseases (NIAID) of the National Institutes of Health. This project contains no duplication of effort within the Military Departments or other government organizations. The cited work is also consistent with the Assistant Secretary of Defense, Research and Engineering Science and Technology focus areas, and supports the principal area of Military Relevant Infectious Diseases to include HIV.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Military HIV Research Program	0.000	-	-	-	-
Description: This project conducts research on HIV, which causes AIDS. Work in this area includes refining improved identification methods to determine genetic diversity of the virus and evaluating and preparing overseas sites for future vaccine trials. Additional activities include refining candidate vaccines for preventing HIV and undertaking preclinical studies (studies required before testing in humans) to assess vaccine for potential to protect and/or manage the disease in infected individuals.					
Accomplishments/Planned Programs Subtotals	0.000	-	-	-	-

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

The program receives periodic funding from Division of AIDS of NIAID ranging from \$10-20 million per year through an Interagency Agreement with USAMRMC.

D. Acquisition Strategy

N/A

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Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130: <i>Defense Health Program I BA 2: RDT&E</i>	R-1 Program Element (Number/Name) PE 0602787DHA I <i>Medical Technology (AFRRI)</i>
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
Total Program Element	4.070	1.411	1.439	1.468	0.000	1.468	1.497	1.527	1.557	1.587	Continuing	Continuing
241A: <i>Biodosimetry (USUHS)</i>	0.832	0.289	0.295	0.301	0.000	0.301	0.307	0.313	0.319	0.324	Continuing	Continuing
241B: <i>Internal Contamination (USUHS)</i>	0.438	0.152	0.155	0.158	0.000	0.158	0.161	0.164	0.167	0.170	Continuing	Continuing
241C: <i>Radiation Countermeasures (USUHS)</i>	2.800	0.970	0.989	1.009	0.000	1.009	1.029	1.050	1.071	1.093	Continuing	Continuing

A. Mission Description and Budget Item Justification

For the Uniformed Services University of the Health Sciences/Armed Forces Radiobiology Research Institute (USUHS/AFRRI), is a unique Department of Defense asset, responsible for preserving and protecting the health and performance of U.S. military personnel operating in potential radiologically contaminated multi-domain conventional or hybrid battle spaces and urban environments; through research, education, and operational training that advance understanding of the effects of ionizing radiation in line with the 21st century dynamic threat landscape and national security threats posed by non-state actors, hostile state actors, and near-peer adversaries, as well as providing rapidly deployable radiation medicine expertise in response to a radiological or nuclear event domestically or abroad.

The uniqueness of USUHS/AFRRI comes from operating and maintaining state-of-the-art radiation facilities and dosimetry systems to support military relevant radiobiology research. These facilities enable researchers to conduct a wide range of radiobiology experiments in order to investigate militarily-relevant scenarios, and better understand radiation effects and potential mitigation strategies. A team of scientist, physicists, engineers, operators and technicians use proven and traceable dosimetry systems (e.g., ionization chambers, radiochromic film, thermoluminescent dosimeters) and consensus protocols to characterize radiation fields. Due to these facilities our researchers are able to experiment with photons (?-rays) which are intended to simulate fallout environments and are delivered by two cobalt-60 facilities - the high-level cobalt facility (HLCF), and for lower (chronic) doses and dose rates, the low-level cobalt facility (LLCF). These type of radiation sources are used for acute and chronic studies of materials, biologic specimens, and small and large animals. The LLCF also provides to our scientist low-dose rate gamma rays to simulate chronic exposure to low absorbed doses. Therefore, it also supports research focused on late or delayed radiation effects in biological specimens.

USUHS/AFRRI researchers are also able to use Mixed-radiation fields (photons and neutrons) which are available from USUHS/AFRRI's Training, Research, Isotopes, General Atomics (TRIGA) reactor. The reactor is operated in either steady-state or pulsed mode to simulate a wide range of prompt exposure scenarios on a nuclear battlefield. The USUHS/AFRRI's TRIGA is the only one dedicated to military radiobiology research. The reactor produces a controlled, self-sustaining fission chain reaction in the reactor core which, in addition to the fuel elements and control rods (containing boron carbide), which includes a neutron start-up source (americium/beryllium). It is suspended under 4.9 m of water within a pool (an effective radiation shield) in a carriage assembly that allows movement of the core between two exposure rooms for experimental work with large-animal or other studies. The advantages of such a movable reactor core are that the quantity and character of the radiation that reaches the exposure facilities can be controlled, and more than one exposure facility can be used during reactor operations.

Our state-of-the-art radiation facilities are also able to provide a wide range of photon and electron irradiations for partial- and whole-body geometries by using a linear accelerator (LINAC) and a small animal radiation research platform (SARRP) providing a range of radiation types, energies, field sizes and dose rates and is extensively

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Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Defense Health Agency	Date: March 2022
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Appropriation/Budget Activity 0130: <i>Defense Health Program I BA 2: RDT&E</i>	R-1 Program Element (Number/Name) PE 0602787DHA I <i>Medical Technology (AFRRI)</i>
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used to support standard cell configurations (i.e., 6-, 24- and 96-well plates), and targeted partial body irradiations of mice, minipigs, and nonhuman-primates (NHP) animal models. AFRRI's LINAC is used to produce, monitor, control and form photon or electron beams to the specified target. Whole-body irradiations are also possible depending on the animal size and desired dose rate. An Xstrahl SARRP facility is capable of operating at 220 kVp and 13 mA yielding a dose rate at the isocenter of approximately 2.6 Gy/min. Onboard portal camera and cone beam CT imaging systems are used to ensure precise dose delivery. Lung- and gut-only irradiation protocols are approved and have been extensively used to support radiation countermeasure development in the mouse model. Other imaging support is provided by a Philips Brilliance computed tomography (CT) big bore scanner. Some features of the scanner include an 85-cm bore size to accommodate larger research subjects, 60-cm true scan field of view and 16-slices per revolution. The above radiation sources and generators are used to support USUHS/AFRRI's current research focus areas which we will address in the following section.

Our scientific research goals includes maintaining a pool of highly qualified radiation biologists, and basic and applied research in identification and early development of measures to prevent, assess, and treat radiation injury. USUHS/AFRRI scientists conduct and publish research critical to the Department of Defense for force health protection and also contribute to the health and well-being of the population at large. USUHS/AFRRI research thrusts include development of diagnosis of radiation induced injury (biodosimetry), internalized radionuclides (internal contamination) and radiation countermeasures.

Research findings are mainly focused to advance the development and to produce the following: (1) To establish processes to permit rapid assessment of radiation exposed specimens using novel triage protocols; (2) To developed novel technologies to minimized the use of animal models in the study of radiation effects; (3) To investigate the overall radiation effect by internal contamination in the microbiome and anatomical tissue; (4) To find novel biomarkers, late effects and immunosuppression of radiation injury that can quantitate effects on combat performance decrements; (4) To identify novel therapeutic strategies that will support military operations within a nuclear or radiological environment minimizing ground troops short and long term adverse risk.

B. Program Change Summary (\$ in Millions)	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023 Base</u>	<u>FY 2023 OCO</u>	<u>FY 2023 Total</u>
Previous President's Budget	1.411	1.439	1.468	0.000	1.468
Current President's Budget	1.411	1.439	1.468	0.000	1.468
Total Adjustments	0.000	0.000	0.000	0.000	0.000
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	0.000	-			

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency										Date: March 2022		
Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0602787DHA / Medical Technology (AF RRI)				Project (Number/Name) 241A / Biodosimetry (USUHS)			
COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
241A: <i>Biodosimetry (USUHS)</i>	0.832	0.289	0.295	0.301	0.000	0.301	0.307	0.313	0.319	0.324	Continuing	Continuing

A. Mission Description and Budget Item Justification

For the Uniformed Services University of the Health Sciences/Armed Forces Radiobiology Research Institute (USUHS/AFRRI), the Biodosimetry program address clinical symptoms of radiation exposure, reach back reference capabilities and is strategically poised to host the DoD's advance Radiationbiology clinical (CLIP) certified laboratory, meeting the objective of Senate Report SR 114-63. The Biodosimetry laboratory also received clinical specimens from the Fukushima radiation accident in 2011, showcasing USUHS/AFRRI's capabilities to support the Department of Defense in case of a radiation incident.

Research findings are focused to advance the development and to produce the following: (1) To establish clinically certified processes to permit rapid assessment of radiation exposed specimens; (2) To access radiation exposure by developing and providing biological and biophysical dosimetry capabilities for acute, protracted, and prior radiation exposure; (3) To develop novel triage protocols for rapid assessment of radiation exposure; (4) To establish equipment triage automation to support the ability to manage mass-casualty radiation incidents around the globe.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Biodosimetry (USUHS)	0.289	0.295	0.301	0.000	0.301
Description: Biodosimetry (USUHS/AFRRI): Research findings are focused to advance the development and to produce the following: (1) To establish clinically certified processes to permit rapid assessment of radiation exposed specimens; (2) To access radiation exposure by developing and providing biological and biophysical dosimetry capabilities for acute, protracted, and prior radiation exposure; (3) To develop novel triage protocols for rapid assessment of radiation exposure; (4) To establish equipment triage automation to support the ability to manage mass-casualty radiation incidents around the globe.					
In addition to the primary achievement of research objectives, the program educates Federal employees as a benefit to the public they serve through Federal service, through support to civil authorities, and in non-Federal professional and academic collaborations.					
Description: Biodosimetry (USUHS/AFRRI): Research findings are focused to advance the development and to produce the following: (1) To establish clinically certified processes to permit rapid assessment of radiation exposed specimens; (2) To access radiation exposure by developing and providing biological and biophysical dosimetry capabilities for acute, protracted, and prior radiation exposure; (3) To develop novel triage protocols					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0602787DHA / <i>Medical Technology (AF RRI)</i>	Project (Number/Name) 241A / <i>Biodosimetry (USUHS)</i>

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
<p>for rapid assessment of radiation exposure; (4) To establish equipment triage automation to support the ability to manage mass-casualty radiation incidents around the globe.</p> <p>In addition to the primary achievement of research objectives, the program educates Federal employees as a benefit to the public they serve through Federal service, through support to civil authorities, and in non-Federal professional and academic collaborations.</p> <p>FY21 Accomplishments:</p> <p>(1) Validated the HIRI algorithm concept using animals (i.e., baboons, canine, and mice) dose-response databases for an extended time window up to 10 to 14 days after exposure.</p> <p>(2) Established a RICA algorithm for assessment of H-ARS severity using NHP radiation dose-response model based on CBC cell types biomarkers using the METREPOL system.</p> <p>(3) Developed a quantitative inhibition PCR assay of nuclear and mitochondrial DNA using long- and short amplicon PCR.</p> <p>(4) Evaluated radiation-dose and time-course response following exposure initially to photon irradiation.</p> <p>(5) Compared gamma ray v/s neutron mixed field exposures on the inhibition PCR assay.</p> <p>(6) Characterized the utility of hematology biodosimetry algorithms (i.e., HIRI, RICA) to assess radiation injury after radiation exposures.</p> <p>(7) Established a quantitative inhibition PCR of DNA damage using blood lymphocyte models and characterize its utility for assessment of radiation exposure.</p> <p>(8) Performed simulated in vitro partial-body exposure studies and use cytogenetic biomarkers (PCC assay).</p> <p>(9) Evaluated the PCC endpoints (i.e., excess PCC fragments, lengths ratios, rings, and dicentric) for optimum assessment of the fraction of body exposed and dose to the irradiated fraction using in vivo human blood lymphocytes model.</p> <p>(10) Investigated gamma rays v/s mixed field exposures on PCC assay to distinguish whole-body v/s partial body high dose radiation exposures.</p> <p>(11) In 2019/2021, 15 manuscripts were published.</p> <p>FY 2022 Plans:</p> <p>FY 2022 plans are to continue efforts as outlined in FY 2021 and to perform the following studies:</p> <p>(1) To establish processes to permit processing assessments of radiation exposure from specimens by testing the novel cytokinesis-block micronucleus cytome assay (CBMN). The CBMN is a comprehensive system for</p>					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0602787DHA / <i>Medical Technology (AF RRI)</i>	Project (Number/Name) 241A / <i>Biodosimetry (USUHS)</i>

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
<p>measuring DNA damage, cytostasis and cytotoxicity. DNA damage events are scored specifically in once-divided binucleated (BN) cells and include (a) micronuclei (MNI), a biomarker of chromosome breakage and/or whole chromosome loss, (b) nucleoplasmic bridges (NPBs), a biomarker of DNA misrepair and/or telomere end-fusions, and (c) nuclear buds (NBUDs), a biomarker of amplified DNA and/or DNA repair complexes. Cytostatic effects are measured via the proportion of mono-, bi- and multinucleated cells and cytotoxicity via necrotic and/or apoptotic cell ratios. Further information regarding mechanisms leading to MNI, NPBs and NBUDs formation is obtained using centromere and/or telomere probes. The assay have the probability to be applied successfully for biomonitoring of in vivo genotoxic radiation exposure, in vitro radiation genotoxicity testing and in diverse research fields such as nutrigenomics and pharmacogenomics as well as a predictor of normal tissue and tumor radiation sensitivity and cancer risk.</p> <p>(2) To test the CBMN assay for triage automation and multivariable linear regression analysis to compare with already proven and globally accepted assays.</p> <p>(3) To establish a surge request procedure for cytogenetic analysis by developing sex and age-dependent CBMN dose-response calibrations curves and validate specimens cryopreservation protocols for delayed analysis using the metaphase-spread chromosome aberrations (i.e., DCA, PCC) assays.</p> <p>(4) To evaluate blood biomarkers to monitor radiation injury of radiation countermeasures.</p> <p>(5) To established the Department of Defense CLIP/CLIA Clinical Biodosimetry laboratory with automated clinical specimen testing to manage mass-casualty radiation incidents around the globe.</p> <p>(6) To publish manuscripts on research findings.</p> <p>FY 2023 Base Plans:</p> <p>(1) To setup sex and age dependent donors in order to establish radiation dose response CBMN assay using optimized processing and staining procedures.</p> <p>(2) To establish dual staining using two different fluoresce probes and to implement those in the automated assay.</p> <p>(3) To produce a suite of protocols for clinical approval and testing validations.</p> <p>(4) To implement quality control and quality assurance processes in order to preserve and ensure specimen testing and integrity.</p> <p>(5) To sustain laboratory clinical accreditation and competency in the cytogenetic biodosimetry service capability.</p> <p>(6) To participate in CBRNE/WMD NATO and military operations exercises.</p> <p>(7) To continue providing Department of Defense radiobiology expert reach back support.</p> <p>FY 2023 OCO Plans:</p>					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0602787DHA / <i>Medical Technology (AF RRI)</i>	Project (Number/Name) 241A / <i>Biodosimetry (USUHS)</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
N/A					
<i>FY 2022 to FY 2023 Increase/Decrease Statement:</i> Pricing adjustment for inflation.					
Accomplishments/Planned Programs Subtotals	0.289	0.295	0.301	0.000	0.301

C. Other Program Funding Summary (\$ in Millions)
N/A

Remarks
The program element 0602787DHA for AFRRRI in addition to the three program elements: 0601115HPPE, 0602115HPPE, and 0603115HP are coordinated and integrated into the portfolio management by the Joint Program Committee-7/ Radiation Health Effects Research Program (RHERP).

D. Acquisition Strategy
N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency										Date: March 2022		
Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0602787DHA / <i>Medical Technology (AF RRI)</i>				Project (Number/Name) 241B / <i>Internal Contamination (USUHS)</i>			
COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
241B: <i>Internal Contamination (USUHS)</i>	0.438	0.152	0.155	0.158	0.000	0.158	0.161	0.164	0.167	0.170	Continuing	Continuing

A. Mission Description and Budget Item Justification

Internal Contamination (USUHS): For the Uniformed Services University of the Health Sciences (USUHS), the mission and research objective for Internal Contamination is to determine whether the short-term and long-term radiological and toxicological risks of embedded metals warrant changes in the current combat and post-combat fragment removal policies for military personnel. Additionally, the biological effects of internalization of radioactive elements from Radiological Dispersal Devices (RDDs) and depleted uranium weapons, as well as therapeutic approaches to enhance the elimination of radionuclides from the body are being investigated.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Internal Contamination (USUHS)	0.152	0.155	0.158	0.000	0.158
Description: Internal Contamination (USUHS): Radioactive material can enter the body by a variety of pathways including ingestion, inhalation, and wound contamination. While some internalized isotopes will be naturally eliminated from the body, many others are not. They remain immobile or are transported and deposited to other organs where they continually irradiate the surrounding tissue. This chronic internal radiation exposure can cause unrepairable cellular damage eventually leading to death. This Program uses innovative approaches to address this pressing health concern.					
FY21 Accomplishments:					
(1) Determined a chemical synthesis route containing a magnetic core.					
(2) Tested the ability of non-magnetic dendrimers to bind uranium and cesium.					
(3) Completed the synthesis of uranium and cesium-templated dendrimers for high-specific metal binding imprinted polymers.					
(4) Completed the preparation of dendrimers with standard metal chelators attached to their terminal ends.					
(5) Assessed the ability of dendrimer containing metal chelators using a novel in vitro system.					
(6) Initiated cytotoxicity assessments of the novel chemically synthesized imprinted polymers.					
(7) Determined the efficacy of molecular imprinted polymers on reducing the body burden of internalized radionuclides using the novel in vitro system.					
(8) Received IACUC approval.					
(9) Animal specimens were submitted for histopathological evaluation and are being evaluated by a board certified pathologist.					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0602787DHA / <i>Medical Technology (AF RRI)</i>	Project (Number/Name) 241B / <i>Internal Contamination (USUHS)</i>

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
<p>(10) Sternal sections were evaluated for Megakaryocytes, indicative of proliferation.</p> <p>(11) Bone marrow was assayed for colony forming units, indicative of proliferation effects and complete blood cell counts were analyzed.</p> <p>(12) Fecal pellets were collected from male and female C57BL/6 mice one and six month's post-TBI were submitted to WRAIR for 16S microbiome sequencing.</p> <p>(13) Serum samples were collected and submitted to Georgetown University for metabolic and lipidomics analysis.</p> <p>(14) Fabricated of gut organ-on-chip model and quality control evaluation.</p> <p>(15) Identified and evaluated small molecules for gut organ-on-chip model.</p> <p>(16) In 2019/2021, five manuscripts were published.</p> <p>FY 2022 Plans:</p> <p>(1) FY2022 plans continue efforts as outlined in FY 2021 in addition to the following: The Department of Defense and Department of Veterans Affairs recognized the need for a better understanding of the health effects of embedded metal fragments and enhanced health surveillance of personnel suffering from such injuries. In response, the Department of Defense Health Affairs issued a directive instructing surgeons to save any excised fragments for further analysis so that the metals could be identified. In addition, the directive compiled a list of "metals of concern" to enhance patient follow-up with the establishment of the Toxic Embedded Fragment Center at the Baltimore VA Medical Center in order to follow-up with service members. These developments led to further collaborations between USUHS/AFRRI and the Baltimore DVA, University of Maryland School of Medicine, U.S. FDA, and the University of Kentucky resulting in receiving support by a Congressionally Directed Medical Research Program (CDMRP) funded project.</p> <p>(2) To validate signaling pathways by western blot and compare protein expression with age matched control minipigs tissues.</p> <p>(3) Perform ELISA for protein markers for gut leakage/intestinal permeability to support disruption of gut microflora to confirm the data from microbiome analysis.</p> <p>(4) Validation of small molecules for gut organ-on-chip model in murine model.</p> <p>FY 2023 Base Plans:</p> <p>FY2023 plans continue efforts as outlined in FY 2022.</p> <p>FY 2023 OCO Plans:</p>					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0602787DHA / <i>Medical Technology (AF RRI)</i>	Project (Number/Name) 241B / <i>Internal Contamination (USUHS)</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
N/A					
<i>FY 2022 to FY 2023 Increase/Decrease Statement:</i> Pricing adjustment for inflation.					
Accomplishments/Planned Programs Subtotals	0.152	0.155	0.158	0.000	0.158

C. Other Program Funding Summary (\$ in Millions)
N/A

Remarks
The program element 0602787DHA for AFRRRI in addition to the three program elements: 0601115HPPE, 0602115HPPE, and 0603115HP are coordinated and integrated into the portfolio management by the Joint Program Committee-7/ Radiation Health Effects Research Program (RHERP).

D. Acquisition Strategy
N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0602787DHA / <i>Medical Technology (AFRRRI)</i>				Project (Number/Name) 241C / <i>Radiation Countermeasures (USUHS)</i>			
COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
241C: <i>Radiation Countermeasures (USUHS)</i>	2.800	0.970	0.989	1.009	0.000	1.009	1.029	1.050	1.071	1.093	Continuing	Continuing

A. Mission Description and Budget Item Justification

Radiation Countermeasures (USUHS/AFRRRI): For the Uniformed Services University of the Health Sciences/Armed Forces Radiobiology Research Institute (USUHS/AFRRRI), this program supports developmental, mission directed research to investigate new concepts and approaches that will lead to advancements in biomedical strategies for preventing and treating the health effects of human exposure to ionizing radiation as well as radiation combined with injuries (burns, wounds, hemorrhage, microbiome, gastrointestinal damage, neurobehavioral deficits, bone marrow damage), termed radiation combined injury (RCI). RCI's were observed at Hiroshima and Nagasaki, Japan, where 60-70% of victims received thermal burns concurrent with radiation injury. At the Chernobyl reactor meltdown, 10% of 237 victims exposed to radiation received thermal burns as well. In animal models of RCI including rat, guinea pig, dog, and swine, burns and wounds usually increase mortality after otherwise non-lethal radiation exposures. Consequences of RCI include acute myelosuppression, immune system inhibition, fluid imbalance, macro/microcirculation failure, massive cellular damage, and disruption of vital organ functions, which can lead to multiple organ dysfunction syndrome. There are different syndromes based on the time of manifestation in relation to radiation exposure; acute, delayed, late, and chronic syndromes. Acute radiation syndrome (ARS) is characterized by the differential response of the important organs to different doses of radiation. The ARS sub-syndromes include three major clinically-relevant pathologies; hematopoietic sub-syndrome (H-ARS), gastrointestinal sub-syndrome (GI-ARS), and neurovascular sub-syndrome (NV-ARS or CNS-ARS). Radiation countermeasures have been categorized as radioprotectors, radiomitigators, and therapeutics, based on the time of administration in relation to radiation exposure. The majority of countermeasures developed are for specific tissue injuries or specific syndromes. ARS is receiving the most attention, though other syndromes also need equal consideration.

Currently, treatments for ARS are limited: only the H-ARS has viable therapeutic options and even those are limited; Neupogen, Neulasta, Leukine, and Nplate. USUHS/AFRRRI researchers made significant contributions in the initial development of the first three agents. These H-ARS treatments are genetically engineered recombinant growth factors or cytokines that were developed for other indications and recently repurposed for H-ARS. All U.S. Food and Drug Administration (FDA) -approved agents for H-ARS are radiomitigators. No radioprotector, either for H-ARS or GI-ARS has yet been approved for human use.

Due to the increasing risk of nuclear and radiological terrorist attacks or accidents has renewed interest in developing radiation medical countermeasures. Our Radiation Countermeasures goals ranges from exploration of biological processes likely to form the basis of technological solutions, to initial feasibility studies of promising solutions. Program objectives focus on preventing and mitigating the health consequences from exposures to ionizing radiation, in the context of probable threats to U.S. forces in current tactical, humanitarian and counterterrorism mission environments. New protective, and/or combination of FDA approved treatments and therapeutic strategies will broaden the military commander's options for operating within nuclear or radiological environments by minimizing both short-and long-term risks of adverse health consequences.

Research findings are focused to advance the understanding and to produce the following: (1) To identify new therapeutics candidates that show promising advancement to further development; (2) To developed novel technologies to minimized the use of animal models in the study of radiation countermeasure

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0602787DHA / Medical Technology (AF RRI)	Project (Number/Name) 241C / Radiation Countermeasures (USUHS)
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effects; (3) To investigate the overall radiation effect by countermeasures in the microbiome and anatomical tissue; (4) To find novel biomarkers, late effects and immunosuppression of radiation injury that can quantitate effects on combat performance decrements; (4) To identify novel therapeutic strategies that will support military operations within a nuclear or radiological environment minimizing ground troops short and long term adverse risk.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
<p>Title: Radiation Countermeasures (USUHS)</p> <p>Description: For the Uniformed Services University of the Health Sciences/Armed Forces Radiobiology Research Institute (USUHS/AFRRI), this program supports developmental, mission directed research to investigate new concepts and approaches that will lead to advancements in biomedical strategies for preventing and treating the health effects of human exposure to ionizing radiation as well as radiation combined with injuries (burns, wounds, hemorrhage, microbiome, gastrointestinal damage, neurobehavioral deficits, bone marrow damage), termed radiation combined injury. Research findings are focused to advance the understanding and to produce the following: (1) To identify new therapeutics candidates that show promising advancement to further development; (2) To developed novel technologies to minimized the use of animal models in the study of radiation countermeasure effects; (3) To investigate the overall radiation effect by countermeasures in the microbiome and anatomical tissue; (4) To find novel biomarkers, late effects and immunosuppression of radiation injury that can quantitate effects on combat performance decrements; (4) To identify novel therapeutic strategies that will support military operations within a nuclear or radiological environment minimizing ground troops short and long term adverse risk.</p> <p>In addition to the primary achievement of research objectives, the program educates Federal employees as a benefit to the public they serve through Federal service, through support to civil authorities, and in non-Federal professional and academic collaborations.</p> <p>Description: For the Uniformed Services University of the Health Sciences/Armed Forces Radiobiology Research Institute (USUHS/AFRRI), this program supports developmental, mission directed research to investigate new concepts and approaches that will lead to advancements in biomedical strategies for preventing and treating the health effects of human exposure to ionizing radiation as well as radiation combined with injuries (burns, wounds, hemorrhage, microbiome, gastrointestinal damage, neurobehavioral deficits, bone marrow damage), termed radiation combined injury. Research findings are focused to advance the understanding and to produce the following: (1) To identify new therapeutics candidates that show promising advancement to further development; (2) To developed novel technologies to minimized the use of animal models in the study of radiation countermeasure effects; (3) To investigate the overall radiation effect by countermeasures</p>	0.970	0.989	1.009	0.000	1.009

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0602787DHA / <i>Medical Technology (AF RRI)</i>	Project (Number/Name) 241C / <i>Radiation Countermeasures (USUHS)</i>

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
<p>in the microbiome and anatomical tissue; (4) To find novel biomarkers, late effects and immunosuppression of radiation injury that can quantitate effects on combat performance decrements; (4) To identify novel therapeutic strategies that will support military operations within a nuclear or radiological environment minimizing ground troops short and long term adverse risk.</p> <p>In addition to the primary achievement of research objectives, the program educates Federal employees as a benefit to the public they serve through Federal service, through support to civil authorities, and in non-Federal professional and academic collaborations.</p> <p>FY21 Accomplishments:</p> <ol style="list-style-type: none"> (1) Completed methylome and proteome studies with hematopoietic progenitor cells using murine model. (2) Characterized and correlated the dose and dose rate effect of sub-lethal neutron radiation on genetic and epigenomic perturbations in hematopoietic progenitor cells in male mice. (3) Determined transcriptomic signatures that are correlated with radiation injury, using whole blood transcriptome analysis. (4) Established the gut organ-on-chip model. (5) Identified and tested small molecule countermeasure following Lipinski's rules. (6) Selected countermeasure therapeutic to test using the gut-organ-on-chip model for radioprotective and radiomitigative potential. (7) Tested long term effect in bone marrow irradiated with 2.5% mice. (8) Characterized injury to lungs, heart, and brain by analyzing biomarkers specific to this organs and vascular endothelial tissue at different radiation doses. (9) Monitored up to six months mice exposed to BPI to study delayed effects of radiation exposure. (10) Screened potential prophylactic countermeasures in PBI with 2.5% model. (11) Established growth conditions for BM endothelium and vascular endothelium in 3D cell culture environment. (12) Established optimal conditions for endothelial/immune cell contact and non/contact co-culture in 3D cell culture environment. (13) Performed gamma radiations with single cultures in 3D cell culture system. (14) Conducted cellular experiments (DNA damage, survival, functions) (15) Performed gamma radiations with endothelium/immune cell 3D cultures. 					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0602787DHA / <i>Medical Technology (AF RRI)</i>	Project (Number/Name) 241C / <i>Radiation Countermeasures (USUHS)</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
<p>(16) Tested bone marrow and ileum of male and female mice to assess levels of cytokine, AKT, MAPK and caspase-3 for organ injury.</p> <p>(17) Tested tissue lysates of bone marrow, ileum and spleen of male and female mice for cytokine and complement component 3.</p> <p>(18) Completed IL-18 studies indicating that IL-18 binding protein (IL-18BP) can be tested as potential drug target. Mice treatment with IL-18BP indicates inhibition of downstream signaling, protecting the mice tissue from radiation by decreasing apoptosis after total body radiation.</p> <p>(19) In 2019/2021, 44 manuscripts were published.</p> <p>FY 2022 Plans: FY2022 plans continue efforts as outlined in FY 2021 in addition to the following:</p> <p>(1) To complete methylome and proteome studies and identify early epigenomic steps post-radiation caused by LDR/LDR neutron exposure to murine stem cells populations as potential low dose exposure markers using multiple analytical bioinformatics programs.</p> <p>(2) To down-select potential gut-organ-on-chip small molecule and test for efficacy in murine model.</p> <p>(3) To screen one potential prophylactic countermeasure in the partial body irradiation model with 2.5% sparing of bone marrow.</p> <p>(4) To perform neutron/gamma radiation with single 3D cell culture.</p> <p>(5) To perform neutron/gamma radiations with endothelium/immune cell 3D cultures.</p> <p>(6) To determine DRF for promising candidates.</p> <p>(7) To determine hematological end points to assess recovery from H-ARS.</p> <p>(8) To analyze specimens of the jejunum after lethal irradiation in mice treated with FDA-approved therapeutics.</p> <p>(9) To identify other animal models where various anatomical sites (e.g. intestinal, oral, cutaneous, pulmonary, and urinary, etc) can be interrogated for microbiome alterations.</p> <p>(10) To develop an in vitro Caco2 IL-18 receptor knock out cell line using the CRISPR technology and 3D cell culture to test IL-18BP efficacy prior to animal testing.</p> <p>(11) To optimize the gastro-intestinal organ-on-chip model using intestinal cell lines to mimic the 3D architecture of the intestinal physiology.</p> <p>(12) To define biomarkers of neurobehavioral deficits following low-dose exposure.</p> <p>(13) To identify circulating miRNAs at different time points following low-dose irradiation.</p> <p>(14) To determine the relationship between circulating miRNAs and neurobehavioral deficits.</p> <p>(15) To identify miRNA in exosomes from radiation exposed human primary cell lines that target CXCR4 receptor in recipient cells that facilitate proliferation or neutrophil progenitors using high-throughput methods.</p>					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0602787DHA / <i>Medical Technology (AF RRI)</i>	Project (Number/Name) 241C / <i>Radiation Countermeasures (USUHS)</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
(16) To determine the effect of exosome-packed selected miRNA on the release of neutrophils from BM cells using in vitro BM model, and their interactions with G-CSF and GM-CSF, with gamma radiation. FY 2023 Base Plans: FY2023 plans continue efforts as outlined in FY 2022. FY 2023 OCO Plans: N/A FY 2022 to FY 2023 Increase/Decrease Statement: Pricing adjustment for inflation.					
Accomplishments/Planned Programs Subtotals	0.970	0.989	1.009	0.000	1.009

C. Other Program Funding Summary (\$ in Millions)
N/A

Remarks
The program element 0602787DHA for AFRRRI in addition to the three program elements: 0601115HPPE, 0602115HPPE, and 0603115HP are coordinated and integrated into the portfolio management by the Joint Program Committee-7/ Radiation Health Effects Research Program (RHERP).

D. Acquisition Strategy
USUHS optimizes these research funds to achieve its research objectives, often in partnership and collaboration with funding received from other DoD and interagency sources through Interagency Agreements and inter-service Support Agreements, which may be executed via Federal assistance agreements or contracts.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130: <i>Defense Health Program I BA 2: RDT&E</i>	R-1 Program Element (Number/Name) PE 0603002DHA I <i>Medical Advanced Technology (AFRRI)</i>
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
Total Program Element	1.015	0.352	0.359	0.366	0.000	0.366	0.373	0.380	0.388	0.396	Continuing	Continuing
242A: <i>Biodosimetry (USUHS)</i>	0.607	0.210	0.214	0.218	0.000	0.218	0.222	0.226	0.231	0.260	Continuing	Continuing
242B: <i>Radiation Countermeasures (USUHS)</i>	0.408	0.142	0.145	0.148	0.000	0.148	0.151	0.154	0.157	0.136	Continuing	Continuing

A. Mission Description and Budget Item Justification

For the Uniformed Services University of the Health Sciences/Armed Forces Radiobiology Research Institute (USUHS/AFRRI), is a unique Department of Defense asset, responsible for preserving and protecting the health and performance of U.S. military personnel operating in potential radiologically contaminated multi-domain conventional or hybrid battle spaces and urban environments; through research, education, and operational training that advance understanding of the effects of ionizing radiation in line with the 21st century dynamic threat landscape and national security threats posed by non-state actors, hostile state actors, and near-peer adversaries, as well as providing rapidly deployable radiation medicine expertise in response to a radiological or nuclear event domestically or abroad.

The uniqueness of USUHS/AFRRI comes from operating and maintaining state-of-the-art radiation facilities and dosimetry systems to support military relevant radiobiology research. These facilities enable researchers to conduct a wide range of radiobiology experiments in order to investigate militarily-relevant scenarios, and better understand radiation effects and potential mitigation strategies. A team of scientist, physicists, engineers, operators and technicians use proven and traceable dosimetry systems (e.g., ionization chambers, radiochromic film, thermoluminescent dosimeters) and consensus protocols to characterize radiation fields. Due to these facilities our researchers are able to experiment with photons (?-rays) which are intended to simulate fallout environments and are delivered by two cobalt-60 facilities - the high-level cobalt facility (HLCF), and for lower (chronic) doses and dose rates, the low-level cobalt facility (LLCF). These type of radiation sources are used for acute and chronic studies of materials, biologic specimens, and small and large animals. The LLCF also provides to our scientist low-dose rate gamma rays to simulate chronic exposure to low absorbed doses. Therefore, it also supports research focused on late or delayed radiation effects in biological specimens.

USUHS/AFRRI researchers are also able to use Mixed-radiation fields (photons and neutrons) which are available from USUHS/AFRRI's Training, Research, Isotopes, General Atomics (TRIGA) reactor. The reactor is operated in either steady-state or pulsed mode to simulate a wide range of prompt exposure scenarios on a nuclear battlefield. The USUHS/AFRRI's TRIGA is the only one dedicated to military radiobiology research. The reactor produces a controlled, self-sustaining fission chain reaction in the reactor core which, in addition to the fuel elements and control rods (containing boron carbide), which includes a neutron start-up source (americium/beryllium). It is suspended under 4.9 m of water within a pool (an effective radiation shield) in a carriage assembly that allows movement of the core between two exposure rooms for experimental work with large-animal or other studies. The advantages of such a movable reactor core are that the quantity and character of the radiation that reaches the exposure facilities can be controlled, and more than one exposure facility can be used during reactor operations.

Our state-of-the-art radiation facilities are also able to provide a wide range of photon and electron irradiations for partial- and whole-body geometries by using a linear accelerator (LINAC) and a small animal radiation research platform (SARRP) providing a range of radiation types, energies, field sizes and dose rates and is extensively used to support standard cell configurations (i.e., 6-, 24- and 96-well plates), and targeted partial body irradiations of mice, minipigs, and nonhuman-primates (NHP) animal models. AFRRI's LINAC is used to produce, monitor, control and form photon or electron beams to the specified target. Whole-body irradiations are also possible

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Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Defense Health Agency	Date: March 2022
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Appropriation/Budget Activity 0130: <i>Defense Health Program I BA 2: RDT&E</i>	R-1 Program Element (Number/Name) PE 0603002DHA I <i>Medical Advanced Technology (AFRRI)</i>
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depending on the animal size and desired dose rate. An Xstrahl SARRP facility is capable of operating at 220 kVp and 13 mA yielding a dose rate at the isocenter of approximately 2.6 Gy/min. Onboard portal camera and cone beam CT imaging systems are used to ensure precise dose delivery. Lung- and gut-only irradiation protocols are approved and have been extensively used to support radiation countermeasure development in the mouse model. Other imaging support is provided by a Philips Brilliance computed tomography (CT) big bore scanner. Some features of the scanner include an 85-cm bore size to accommodate larger research subjects, 60-cm true scan field of view and 16-slices per revolution. The above radiation sources and generators are used to support USUHS/AFRRI's current research focus areas which we will address in the following section.

Our scientific research goals includes maintaining a pool of highly qualified radiation biologists, and basic and applied research in identification and early development of measures to prevent, assess, and treat radiation injury. USUHS/AFRRI scientists conduct and publish research critical to the Department of Defense for force health protection and also contribute to the health and well-being of the population at large. USUHS/AFRRI research thrusts include development of diagnosis of radiation induced injury (biodosimetry), internalized radionuclides (internal contamination) and radiation countermeasures.

The program capitalizes on findings under PE 0602787HP, Medical Technology, and from industry and academia to advance novel medical countermeasures into and through pre-clinical studies toward newly licensed products. Research findings are mainly focused to advance the development and to produce the following: (1) To establish processes to permit rapid assessment of radiation exposed specimens using novel triage protocols; (2) To developed novel technologies using animal models in the study of radiation effects; (3) To investigate the overall radiation effect by internal contamination in the microbiome and anatomical tissue; (4) To find novel biomarkers, late effects and immunosuppression of radiation injury that can quantitate effects on combat performance decrements; (4) To identify novel therapeutic strategies that will support military operations within a nuclear or radiological environment minimizing ground troops short and long term adverse risk.

B. Program Change Summary (\$ in Millions)	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023 Base</u>	<u>FY 2023 OCO</u>	<u>FY 2023 Total</u>
Previous President's Budget	0.352	0.359	0.366	0.000	0.366
Current President's Budget	0.352	0.359	0.366	0.000	0.366
Total Adjustments	0.000	0.000	0.000	0.000	0.000
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	0.000	-			

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency										Date: March 2022		
Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0603002DHA / Medical Advanced Technology (AFRRI)				Project (Number/Name) 242A / Biodosimetry (USUHS)			
COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
242A: <i>Biodosimetry (USUHS)</i>	0.607	0.210	0.214	0.218	0.000	0.218	0.222	0.226	0.231	0.260	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Biodosimetry program capitalizes on findings under PE 0602787HP, Medical Technology, and from industry and academia to advance novel medical countermeasures into and through pre-clinical studies toward newly licensed products. Research findings are focused to advance the development and to produce the following: (1) To establish clinically certified processes to permit rapid assessment of radiation exposed specimens; (2) To access radiation exposure by developing and providing biological and biophysical dosimetry capabilities for acute, protracted, and prior radiation exposure; (3) To develop novel triage protocols for rapid assessment of radiation exposure; (4) To establish equipment triage automation to support the ability to manage mass-casualty radiation incidents around the globe.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Biodosimetry (USUHS/AFRRI)	0.210	0.214	0.218	0.000	0.218
<p>Description: The Biodosimetry program capitalizes on findings under PE 0602787HP, Medical Technology, and from industry and academia to advance novel medical countermeasures into and through pre-clinical studies toward newly licensed products. Research findings are focused to advance the development and to produce the following: (1) To establish clinically certified processes to permit rapid assessment of radiation exposed specimens; (2) To access radiation exposure by developing and providing biological and biophysical dosimetry capabilities for acute, protracted, and prior radiation exposure; (3) To develop novel triage protocols for rapid assessment of radiation exposure; (4) To establish equipment triage automation to support the ability to manage mass-casualty radiation incidents around the globe.</p> <p>In addition to the primary achievement of research objectives, the program educates Federal employees as a benefit to the public they serve through Federal service, through support to civil authorities, and in non-Federal professional and academic collaborations.</p> <p>FY21 Accomplishments: (1) Sustain efforts to establish a quality and assurance control plan for measurements of dose by cytogenetic chromosome aberration assay. (2) Continued the evaluation and validation of new radiation-responsive biomarkers in NHP and human models for biodosimetric diagnostic applications. (3) Established and extended the use of hematology biodosimetry algorithms for radiation-dose assessment using multiple cell-types biomarkers and animals.</p>					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603002DHA / Medical Advanced Technology (AFRRI)	Project (Number/Name) 242A / Biodosimetry (USUHS)

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
<p>(4) Established, optimized and validated radiation-induced DNA damage based on a quantitative long amplicon real-time PCR assay.</p> <p>(5) Developed a quantitative inhibition PCR assay of mitochondrial DNA using long- and short amplicon PCR using human samples.</p> <p>(6) Developed a quantitative inhibition PCR assay of mitochondrial DNA using long- and short amplicon PCR using mouse samples.</p> <p>(7) Extended the utility of the premature chromosome condensation (PCC) assay investigating the effects of PBI v/s TBI exposures to assess the fraction of the body exposed to radiation.</p> <p>(8) Validated the HIRI algorithm concept using animals (i.e., baboons, canine, and mice) dose-response databases for an extended time window up to 10 to 14 days after exposure.</p> <p>(9) Established a RICA algorithm for assessment of H-ARS severity using NHP radiation dose-response model based on CBC cell types biomarkers using the METREPOL system.</p> <p>(10) In 2019/2021, 15 manuscripts were published.</p> <p>FY 2022 Plans: FY 2022 and FY 2023 Plans: FY 2022 plans are to continue efforts as outlined in FY 2021 and to perform the following studies:</p> <p>(1) To establish processes to permit processing assessments of radiation exposure from specimens by testing the novel cytokinesis-block micronucleus cytome assay (CBMN). The CBMN is a comprehensive system for measuring DNA damage, cytostasis and cytotoxicity. DNA damage events are scored specifically in once-divided binucleated (BN) cells and include (a) micronuclei (MNi), a biomarker of chromosome breakage and/or whole chromosome loss, (b) nucleoplasmic bridges (NPBs), a biomarker of DNA misrepair and/or telomere end-fusions, and (c) nuclear buds (NBUDs), a biomarker of elimination of amplified DNA and/or DNA repair complexes. Cytostatic effects are measured via the proportion of mono-, bi- and multinucleated cells and cytotoxicity via necrotic and/or apoptotic cell ratios. Further information regarding mechanisms leading to MNi, NPBs and NBUDs formation is obtained using centromere and/or telomere probes. The assay have the probability to be applied successfully for biomonitoring of in vivo genotoxic radiation exposure, in vitro radiation genotoxicity testing and in diverse research fields such as nutrigenomics and pharmacogenomics as well as a predictor of normal tissue and tumor radiation sensitivity and cancer risk.</p> <p>(2) To test the CBMN assay for triage automation and multivariable linear regression analysis to compare with already proven and globally accepted assays.</p>					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603002DHA / Medical Advanced Technology (AFRRI)	Project (Number/Name) 242A / Biodosimetry (USUHS)
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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
<p>(3) To establish a surge request procedure for cytogenetic analysis by developing sex and age-dependent CBMN dose-response calibrations curves and validate specimens cryopreservation protocols for delayed analysis using the metaphase-spread chromosome aberrations (i.e., DCA, PCC) assays.</p> <p>(4) To evaluate blood biomarkers to monitor radiation injury of radiation countermeasures.</p> <p>(5) To established the Department of Defense CLIP/CLIA Clinical Biodosimetry laboratory with automated clinical specimen testing to manage mass-casualty radiation incidents around the globe.</p> <p>FY 2023 Base Plans: FY 2023 plans are to continue efforts as outlined in FY 2022.</p> <p>FY 2023 OCO Plans: N/A</p> <p>FY 2022 to FY 2023 Increase/Decrease Statement: Pricing adjustment for inflation.</p>					
Accomplishments/Planned Programs Subtotals	0.210	0.214	0.218	0.000	0.218

C. Other Program Funding Summary (\$ in Millions)
N/A

Remarks
The program element 0602787DHA for AFRRI in addition to the three program elements: 0601115HPPE, 0602115HPPE, and 0603115HP are coordinated and integrated into the portfolio management by the Joint Program Committee-7/ Radiation Health Effects Research Program (RHERP).

D. Acquisition Strategy
USUHS optimizes these research funds to achieve its research objectives, often in partnership and collaboration with funding received from other DoD and interagency sources through Interagency Agreements and inter-service Support Agreements, which may be executed via Federal assistance agreements or contracts.

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603002DHA / Medical Advanced Technology (AFRR)	Project (Number/Name) 242B / Radiation Countermeasures (USUHS)
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
242B: Radiation Countermeasures (USUHS)	0.408	0.142	0.145	0.148	0.000	0.148	0.151	0.154	0.157	0.136	Continuing	Continuing

A. Mission Description and Budget Item Justification

Radiation Countermeasures (USUHS): For the Uniformed Services University of the Health Sciences (USUHS), this program supports applied research for advanced development of biomedical strategies to prevent and treat health consequences from exposure to ionizing radiation. It capitalizes on findings under PE 0602787HP, Medical Technology, and from industry and academia to advance novel medical countermeasures into and through pre-clinical studies toward newly licensed products. Program objectives focus on preventing or mitigating the health consequences from exposures to ionizing radiation alone or in combination with other injuries, in the context of probable threats to US forces in current tactical, humanitarian and counterterrorism mission environments. Findings from basic and developmental research are integrated into highly focused advanced technology development studies yielding protective and therapeutic strategies.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
<p>Title: Radiation Countermeasures (USUHS)</p> <p>Description: Radiation Countermeasures (USUHS): For the Uniformed Services University of the Health Sciences (USUHS), this program supports applied research for advanced development of biomedical strategies to prevent and treat health consequences from exposure to ionizing radiation. It capitalizes on findings under PE 0602787HP, Medical Technology, and from industry and academia to advance novel medical countermeasures into and through pre-clinical studies toward newly licensed products. Program objectives focus on preventing or mitigating the health consequences from exposures to ionizing radiation alone or in combination with other injuries, in the context of probable threats to US forces in current tactical, humanitarian and counterterrorism mission environments. Findings from basic and developmental research are integrated into highly focused advanced technology development studies yielding protective and therapeutic strategies.</p> <p>In addition to the primary achievement of research objectives, the program educates Federal employees as a benefit to the public they serve through Federal service, through support to civil authorities, and in non-Federal professional and academic collaborations.</p> <p>FY21 Accomplishments:</p> <p>(1) There are several radiation countermeasures (BIO 300, TPOm, gamma-tocotrienol, BBT-059, PLX-R18, CDX 301) under advance development and few of them may be FDA approved in near future.</p>	0.142	0.145	0.148	0.000	0.148

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603002DHA / <i>Medical Advanced Technology (AFRRI)</i>	Project (Number/Name) 242B / <i>Radiation Countermeasures (USUHS)</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
<p>(2) Identified and evaluated the transcriptomic profiles of NHP brain compartments to profile the global transcriptomic changes in different brain compartments of NHPs exposed to radiation.</p> <p>(3) Performed the study of two new candidates EC-18 and YK-4-250.</p> <p>(4) Completed EC-18 study.</p> <p>(5) Completed 30 day survival efficacy for Myelo-001 and LA-GM-CFS</p> <p>(6) Performed safety study for YK-4-250</p> <p>(7) Performed 30 day survival efficacy study of EC-18 and YK-4-250.</p> <p>(8) Tested new candidates for basic toxicity and preliminary survival efficacy at a dose of LD70/30 to LD90/30.</p> <p>(9) In 2019/2021, 44 manuscripts were published.</p> <p>FY 2022 Plans: FY 2022 plans are to continue efforts as outlined in FY 2021 and to perform the following studies:</p> <p>(1) To continue ongoing studies using the cutaneous radiation injury in minipigs to analyze the skin microbiome before and after creation of clinically-relevant radiation lesions.</p> <p>(2) To develop IL-18BP peptide as a radiation mitigator.</p> <p>(3) To perform transcriptomics studies with blood of NHP exposed to radiation and treated with PEGylated interleukin-11.</p> <p>(4) To perform proteomic and metabolomics studies with serum samples of NHP exposed to radiation and treated with BBT-059.</p> <p>(5) To optimize and validate a proteomic protocol for validation of radiation biomarkers for countermeasure efficacy.</p> <p>(6) To study the dysfunctional signaling pathway resulting from countermeasure testing in NHP models.</p> <p>FY 2023 Base Plans: FY 2023 plans are to continue efforts as outlined in FY 2022.</p> <p>FY 2023 OCO Plans: N/A</p> <p>FY 2022 to FY 2023 Increase/Decrease Statement: Pricing adjustment for inflation.</p>					
Accomplishments/Planned Programs Subtotals	0.142	0.145	0.148	0.000	0.148

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603002DHA / <i>Medical Advanced Technology (AFRRI)</i>	Project (Number/Name) 242B / <i>Radiation Countermeasures (USUHS)</i>

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

The program element 0602787DHA for AFRRI in addition to the three program elements: 0601115HPPE, 0602115HPPE, and 0603115HP are coordinated and integrated into the portfolio management by the Joint Program Committee-7/ Radiation Health Effects Research Program (RHERP).

D. Acquisition Strategy

USUHS optimizes these research funds to achieve its research objectives, often in partnership and collaboration with funding received from other DoD and interagency sources through Interagency Agreements and inter-service Support Agreements, which may be executed via Federal assistance agreements or contracts.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity
0130: *Defense Health Program I BA 2: RDT&E* **R-1 Program Element (Number/Name)**
PE 0603115DHA I *Medical Technology Development*

COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
Total Program Element	9,798.546	1,994.150	2,008.177	320.496	0.000	320.496	326.420	328.099	332.660	338.070	Continuing	Continuing
300A: <i>CSI - Congressional Special Interests</i>	8,849.659	1,763.897	1,772.980	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	-
238C: <i>Air & Space Austere Environment Patient Care and Transport (AF)</i>	14.921	11.250	12.675	12.866	0.000	12.866	13.122	13.386	13.653	13.927	Continuing	Continuing
284B: <i>Air & Space Physiology, Medicine and Human Performance (AF)</i>	11.156	10.418	11.122	11.471	0.000	11.471	11.700	11.933	12.172	12.415	Continuing	Continuing
285A: <i>Operational Medicine Research & Development (Budgeted) (AF)</i>	17.469	0.232	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
307B: <i>Air & Space Force Health Protection (AF)</i>	29.148	10.046	11.463	11.630	0.000	11.630	11.862	12.098	12.340	12.586	Continuing	Continuing
308B: <i>Expeditionary Medicine Research & Development (Budgeted) (AF)</i>	21.391	2.623	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
309A: <i>Regenerative Medicine (USUHS)</i>	25.909	10.413	10.621	10.833	0.000	10.833	11.051	11.271	11.496	11.724	Continuing	Continuing
373: <i>GDF - Medical Technology Development</i>	401.932	5.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
373A: <i>GDF - MTD (Combat Casualty Care)</i>	0.000	11.168	15.736	24.519	0.000	24.519	26.943	27.950	28.871	29.810	Continuing	Continuing
373B: <i>GDF - MTD (Military Operational Medicine)</i>	0.000	23.255	19.046	34.150	0.000	34.150	32.426	33.152	33.815	34.492	Continuing	Continuing
373C: <i>GDF - MTD (Medical Simulation & Training/Health Informatics)</i>	0.000	12.613	13.044	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
373D: <i>GDF - MTD (Clinical and Rehabilitation Medicine)</i>	0.000	13.040	14.980	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

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Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Defense Health Agency										Date: March 2022		
Appropriation/Budget Activity					R-1 Program Element (Number/Name)							
0130: Defense Health Program I BA 2: RDT&E					PE 0603115DHA I Medical Technology Development							
373E: GDF - MTD (Military Infectious Disease)	0.000	6.409	6.630	12.886	0.000	12.886	13.817	13.747	13.659	13.570	Continuing	Continuing
373F: GDF - MTD (Radiological Health Effects)	0.000	0.501	0.518	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
373G: GDF - MTD (Military Medical Photonics)	0.000	10.000	10.200	10.404	0.000	10.404	10.612	10.824	11.040	11.261	Continuing	Continuing
373H: GDF - MTD (Medical Advanced Technology)	0.000	0.000	0.000	68.016	0.000	68.016	68.576	64.720	63.969	63.969	Continuing	Continuing
378B: CoE-Breast Cancer Center of Excellence (USUHS)	29.843	10.685	10.898	11.116	0.000	11.116	11.339	11.566	11.797	12.033	Continuing	Continuing
379B: CoE-Gynecological Cancer Center of Excellence (USUHS)	26.088	9.341	9.528	9.719	0.000	9.719	9.913	10.111	10.313	10.519	Continuing	Continuing
381: CoE - Integrative Cardiac Health Care (USUHS)	5.929	1.680	1.744	1.809	0.000	1.809	1.875	1.943	1.982	2.022	Continuing	Continuing
382B: CoE-Pain Center of Excellence (USUHS)	9.508	1.945	2.014	2.084	0.000	2.084	2.156	2.230	2.277	2.327	Continuing	Continuing
383A: CoE-Prostate Cancer Center of Excellence (USUHS)	23.812	8.526	8.696	8.870	0.000	8.870	9.047	9.228	9.413	9.600	Continuing	Continuing
431A: Underbody Blast Testing (Army)	68.611	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	-
448A: Military HIV Research Program (Army)	46.516	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
478: Applied Proteogenomics Organizational Learning and Outcomes (APOLLO) Consortium (USUHS)	48.076	18.640	18.724	19.058	0.000	19.058	19.480	19.870	20.267	20.672	Continuing	Continuing
479: Framingham Longitudinal Study (USUHS)	14.760	4.920	4.920	5.018	0.000	5.018	5.118	5.220	5.324	5.430	Continuing	Continuing
499: MHS Financial System Acquisition (DHA)	39.958	1.971	6.011	6.051	0.000	6.051	6.092	6.143	6.266	6.388	Continuing	Continuing

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Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Defense Health Agency										Date: March 2022			
Appropriation/Budget Activity					R-1 Program Element (Number/Name)								
0130: Defense Health Program I BA 2: RDT&E					PE 0603115DHA I Medical Technology Development								
504: WRAIR Vaccine Production Facility Research (Army)	16.152	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
506: Health Research for Improved Medical Readiness and Healthcare Delivery (USUHS)	11.904	11.141	11.385	11.631	0.000	11.631	11.883	12.141	12.384	12.632		Continuing	Continuing
507: Brain Injury and Disease Prevention, Treatment and Research (USUHS)	13.317	13.583	13.855	14.132	0.000	14.132	14.415	14.703	14.997	15.297		Continuing	Continuing
508: Psychological Health and Resilience (USUHS)	7.000	7.140	7.283	7.428	0.000	7.428	7.577	7.729	7.884	8.042		Continuing	Continuing
509: Innovative Technologies for Improved Medical Diagnoses, Rehabilitation and Warfighter Readiness (USUHS)	19.323	13.712	14.104	14.505	0.000	14.505	14.916	15.334	15.641	15.954		Continuing	Continuing
511: Cancer Moonshot Initiatives	0.000	0.000	0.000	12.300	0.000	12.300	12.500	12.800	13.100	13.400		Continuing	Continuing
830A: Deployed Warfighter Protection (Army)	46.164	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		Continuing	Continuing

A. Mission Description and Budget Item Justification

Guidance for Development of the Force - Medical Technology Development: This program element (PE) provides funding for promising candidate solutions that are selected for initial safety and effectiveness testing in animal studies and/or small scale human clinical trials regulated by the US Food and Drug Administration prior to licensing for human use. Research in this PE is designed to address areas of interest to the Secretary of Defense regarding Wounded Warriors, capabilities identified through the Joint Capabilities Integration and Development System, and sustainment of Department of Defense and multi-agency priority investments in science, technology, research, and development. Medical research, development, test, and evaluation priorities for the Defense Health Program (DHP) are guided by, and will support, the National Defense Strategy, the National Research Action Plan for Improving Access to Mental Health Services for Veterans, Service Members, and Military Families, and the National Biodefense Strategy.

Program development and execution is peer reviewed and coordinated with all of the Military Services, appropriate Defense agencies or activities and other federal agencies, to include the Department of Veterans Affairs and the Department of Health and Human Services. As research efforts mature, the most promising will transition to advanced concept development funding, PE 0604110. For knowledge products, successful findings will transition into clinical practice guidelines.

Three Centers of Excellence (CoEs) receive medical technology development funds. Management of the Breast and Gynecological Cancer CoEs transfer from the Army to the Uniformed Services University beginning in FY 2017. The Cardiac Health CoE provides evidence-based personalized patient engagement approaches for comprehensive cardiac event prevention through education, outcomes research and technology tools, as well as molecular research to detect cardiovascular disease at

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Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Defense Health Agency Date: March 2022

Appropriation/Budget Activity 0130: <i>Defense Health Program I BA 2: RDT&E</i>	R-1 Program Element (Number/Name) PE 0603115DHA / <i>Medical Technology Development</i>
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an early stage to ultimately discover a signature for cardiovascular health, to find new genes that significantly increase risk for heart attack in Service members and other beneficiaries, and identify molecular markers of obesity and weight loss.

For the Navy Bureau of Medicine and Surgery, this program element includes funds for research management support costs. The Outside Continental US (OCONUS) laboratories conduct focused medical research on vaccine development for Malaria, Diarrhea Diseases, and Dengue Fever. In addition to entomology, HIV studies, surveillance and outbreak response under the Global Emerging Infections Surveillance (GEIS) program and risk assessment studies on a number of other infectious diseases that are present in the geographical regions where the laboratories are located. The CONUS laboratories conduct research on Military Operational Medicine, Combat Casualty Care, Diving and Submarine Medicine, Infectious Diseases, Environmental and Occupational Health, Directed Energy, and Aviation Medicine and Human Performance.

For the Air Force Medical Service (AFMS), medical research and development programs are divided into five primary thrust areas: En-Route care, Expeditionary Medicine, Operational Medicine (in-garrison care), Force Health Protection (FHP) (detect, prevent, threats), and Human Performance. Expeditionary Medicine is focused on care on the battlefield and in field hospitals prior to transporting patients out of theater to CONUS, and studies trauma resuscitation, hemorrhage control, and other life-saving interventions to keep critically wounded patients alive in the golden hour and to the next level of care. The AFMS is the only service transporting patients on long aeromedical evacuation missions. Therefore, the En-Route care thrust area studies include investigation on the impact of transport on patient and providers (including cabin altitude, noise, vibration, and environmental issues affecting physiology on the aircraft), patient safety factors during transport, medical technologies for use during transport, and research to support education and training with simulation for En-Route care providers. The Human Performance thrust area focuses on optimizing airmen physical and psychological performance, assessing the physical and cognitive demands on the operator (pilot/aircrew), facilitating a safe aviation environment through technology and equipment assessment, and improving/ sustaining airmen performance through training. Medical development and biomedical technology investments in FHP seek to deliver an improved FHP capability across the full spectrum of operations with research that prevents injury/ illness through improved identification and control of health risks. Under FHP, sub-project areas include Occupational Hazard Exposure (Includes Flight Hazards and Integrated Risk), Targeted Risk Identification, Mitigation and Treatment (Formerly Pathogen ID and Novel Therapeutics and includes Big Data), FHP Technologies Development and Assessment (Assay and disease detection), and Health Surveillance, Infection, Injury & Immunity. FHP also includes Innovations and Personalized Medicine. Operational medicine is focused on in garrison care – our next most critical issue post OIF/OEF – and how to care for the whole patient and consideration of comorbidities in treatment of wounded warriors and dependents.

For the Uniformed Services University of the Health Sciences (USUHS), medical development programs include the Prostate Cancer Center of Excellence (CoE), the Center for Neuroscience and Regenerative Medicine (CNRM), the Pain CoE, the Breast Cancer CoE, and the Gynecological Cancer CoE. The Prostate CoE, formerly a CSI, was chartered in 1992 to conduct basic, clinical, and translational research programs to combat diseases of the prostate. The Center's mission is fulfilled primarily through its three principal programs -- the Clinical Translational Research Center, the Basic Science Research Program, and the Tri-Service Multicenter Prostate Cancer Database, which encompasses its clinical research work with other participating military medical centers. These affiliated sites contribute data and biospecimens obtained from prostate cancer patients who participate in clinical trials. CNRM brings together the expertise of clinicians and scientists across disciplines to catalyze innovative approaches to TBI research. CNRM research programs emphasize aspects of high relevance to military populations, with a primary focus on patients at the Walter Reed National Military Medical Center. Beginning in FY17, the Breast Cancer CoE funding line and the Gynecological Cancer CoE funding line are transferred from the Army to USUHS.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130: <i>Defense Health Program I BA 2: RDT&E</i>	R-1 Program Element (Number/Name) PE 0603115DHA I <i>Medical Technology Development</i>
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B. Program Change Summary (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Previous President's Budget	1,994.150	235.197	320.496	0.000	320.496
Current President's Budget	1,994.150	2,008.177	320.496	0.000	320.496
Total Adjustments	0.000	1,772.980	0.000	0.000	0.000
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	1,772.980			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			

Congressional Add Details (\$ in Millions, and Includes General Reductions)

Project: 300A: *CSI - Congressional Special Interests*

Congressional Add: 245A - *Amyotrophic Lateral Sclerosis (ALS) Research*

Congressional Add: 293A - *Autism Research*

Congressional Add: 296A - *Bone Marrow Failure Disease Research*

Congressional Add: 310A - *Peer-Reviewed Ovarian Cancer Research*

Congressional Add: 328A - *Peer-Reviewed Multiple Sclerosis Research*

Congressional Add: 335A - *Peer-Reviewed Cancer Research*

Congressional Add: 336A - *Peer-Reviewed Lung Cancer Research*

Congressional Add: 337A - *Peer-Reviewed Orthopaedic Research*

Congressional Add: 338A - *Peer-Reviewed Spinal Cord Research*

Congressional Add: 339A - *Peer-Reviewed Vision Research*

Congressional Add: 352A - *Traumatic Brain Injury/Psychological Health Research*

Congressional Add: 380A - *Peer-Reviewed Breast Cancer Research*

Congressional Add: 390A - *Peer-Reviewed Prostate Cancer Research*

Congressional Add: 392A - *Gulf War Illness Peer-Reviewed Research*

Congressional Add: 396A - *Research in Alcohol and Substance Use Disorders*

Congressional Add: 400A - *Peer-Reviewed Medical Research*

Congressional Add: 417A - *Peer-Reviewed Alzheimer Research*

	FY 2021	FY 2022
	40.000	40.000
	15.000	15.000
	7.500	7.500
	35.000	45.000
	20.000	20.000
	115.000	130.000
	20.000	20.000
	30.000	30.000
	40.000	40.000
	20.000	20.000
	175.000	175.000
	150.000	150.000
	110.000	110.000
	22.000	0.000
	4.000	4.000
	370.000	370.000
	15.000	15.000

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Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130: <i>Defense Health Program I BA 2: RDT&E</i>	R-1 Program Element (Number/Name) PE 0603115DHA I <i>Medical Technology Development</i>
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Congressional Add Details (\$ in Millions, and Includes General Reductions)	FY 2021	FY 2022	
Congressional Add: 439A - <i>Joint Warfighter Medical Research</i>	32.000	24.000	
Congressional Add: 452A - <i>Peer-Reviewed Reconstructive Transplant Research</i>	12.000	12.000	
Congressional Add: 454A - <i>Orthotics and Prosthetics Outcomes Research</i>	15.000	20.000	
Congressional Add: 456A - <i>HIV/AIDS Program</i>	16.000	18.000	
Congressional Add: 459A - <i>Peer-Reviewed Epilepsy Research</i>	12.000	12.000	
Congressional Add: 463A – <i>Program Increase: Restore Core Research Funding Reduction (GDF)</i>	221.215	212.980	
Congressional Add: 495 - <i>Peer-Reviewed Tick-Borne Disease Research</i>	7.000	7.000	
Congressional Add: 496 - <i>Trauma Clinical Research Program</i>	10.000	10.000	
Congressional Add: 501 - <i>Peer-Reviewed Hearing Restoration Research (Army)</i>	10.000	10.000	
Congressional Add: 502 - <i>CSI - Peer-Reviewed Kidney Cancer Research (Army)</i>	50.000	50.000	
Congressional Add: 503 - <i>CSI - Peer-Reviewed Lupus Research (Army)</i>	10.000	10.000	
Congressional Add: 540A - <i>Global HIV/AIDS Prevention (Navy)</i>	8.000	10.000	
Congressional Add: 660A - <i>Tuberous Sclerosis Complex (TSC)</i>	8.000	8.000	
Congressional Add: 790A - <i>Peer-Reviewed Duchenne Muscular Dystrophy</i>	10.000	10.000	
Congressional Add: 512 - <i>Peer-Reviewed Melanoma Research</i>	30.000	40.000	
Congressional Add: 513 - <i>Chronic Pain Management</i>	15.000	15.000	
Congressional Add: 514 - <i>Combat Readiness Medical Research</i>	10.000	10.000	
Congressional Add: 515 - <i>Peer-Reviewed Pancreatic Cancer Research</i>	15.000	15.000	
Congressional Add: 516 - <i>Peer-Reviewed Rare Cancers Research</i>	17.500	17.500	
Congressional Add: 517 - <i>Peer-Reviewed Scleroderma Research</i>	5.000	0.000	
Congressional Add: 300A - <i>Congressional Add - Brain injury and disease prevention research</i>	61.682	60.000	
Congressional Add: 300A - <i>Congressional Add - Clinical research</i>	-	10.000	
Congressional Add Subtotals for Project: 300A		1,763.897	1,772.980
Project: 373H: GDF - MTD (Medical Advanced Technology)			
Congressional Add: <i>N/A</i>	0.000	0.000	
Congressional Add Subtotals for Project: 373H		0.000	0.000

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Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Defense Health Agency	Date: March 2022
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Appropriation/Budget Activity 0130: <i>Defense Health Program I BA 2: RDT&E</i>	R-1 Program Element (Number/Name) PE 0603115DHA I <i>Medical Technology Development</i>
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Congressional Add Details (\$ in Millions, and Includes General Reductions)

Project: 511: *Cancer Moonshot Initiatives*

Congressional Add: *Cancer Moonshot Initiatives (USUHS)*

Congressional Add Subtotals for Project: 511

Congressional Add Totals for all Projects

	FY 2021	FY 2022
	0.000	0.000
	0.000	0.000
	1,763.897	1,772.980

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0603115DHA / Medical Technology Development				Project (Number/Name) 300A / CSI - Congressional Special Interests			
COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
300A: CSI - Congressional Special Interests	8,849.659	1,763.897	1,772.980	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	-

A. Mission Description and Budget Item Justification

In FY 2022, the Defense Health Program funded Congressional Special Interest (CSI) directed research. The strategy for the FY 2022 Congressionally-directed research program is to stimulate innovative research through a competitive, focused, peer-reviewed medical research at intramural and extramural research sites. Because of the CSI annual structure, out-year funding is not programmed.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022
<p>Congressional Add: 245A - Amyotrophic Lateral Sclerosis (ALS) Research</p> <p>FY 2021 Accomplishments: This Congressional Special Interest initiative provided funds for research in Amyotrophic Lateral Sclerosis (ALS). ALS is a degenerative neurological disorder that causes muscle weakness and atrophy throughout the body. The ALS Research Program is a broadly-competed, peer-reviewed research program with the goal to contribute to a cure for ALS by funding innovative preclinical research to develop new treatments for ALS</p> <p>FY 2022 Plans: This Congressional Special Interest initiative provided funds for research in Amyotrophic Lateral Sclerosis (ALS). ALS is a degenerative neurological disorder that causes muscle weakness and atrophy throughout the body. The ALS Research Program is a broadly-competed, peer-reviewed research program with the goal to contribute to a cure for ALS by funding innovative preclinical research to develop new treatments for ALS</p>	40.000	40.000
<p>Congressional Add: 293A - Autism Research</p> <p>FY 2021 Accomplishments: This Congressional Special Interest initiative provided funds for Autism research. The Autism Research Program seeks to improve treatment outcomes of Autism Spectrum Disorder (ASD), lead to a better understanding of ASD, and integrate basic science and clinical observations by promoting innovative research.</p> <p>FY 2022 Plans: This Congressional Special Interest initiative provided funds for Autism research. The Autism Research Program seeks to improve treatment outcomes of Autism Spectrum Disorder (ASD), lead to a better understanding of ASD, and integrate basic science and clinical observations by promoting innovative research.</p>	15.000	15.000
<p>Congressional Add: 296A - Bone Marrow Failure Disease Research</p>	7.500	7.500

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / <i>Medical Technology Development</i>	Project (Number/Name) 300A / <i>CSI - Congressional Special Interests</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022
<p>FY 2021 Accomplishments: This Congressional Special Interest initiative provided funds for bone marrow failure diseases research. The mission of the Bone Marrow Failure Research Program is to sponsor innovative research that will advance the understanding of inherited and acquired bone marrow failure diseases, and improve the health and life of individuals living with these diseases, with the ultimate goal of prevention and/or cure. This effort has solicited research proposals focused on bone marrow failure syndromes and their long-term effects from the basic science and clinical research sectors.</p> <p>FY 2022 Plans: This Congressional Special Interest initiative provided funds for bone marrow failure diseases research. The mission of the Bone Marrow Failure Research Program is to sponsor innovative research that will advance the understanding of inherited and acquired bone marrow failure diseases, and improve the health and life of individuals living with these diseases, with the ultimate goal of prevention and/or cure. This effort has solicited research proposals focused on bone marrow failure syndromes and their long-term effects from the basic science and clinical research sectors.</p>		
<p>Congressional Add: 310A - Peer-Reviewed Ovarian Cancer Research</p> <p>FY 2021 Accomplishments: This Congressional Special Interest initiative provided funds for ovarian cancer research. In striving to achieve the goal of eliminating ovarian cancer, the Ovarian Cancer Research Program (OCRCP) challenges the research community to address high impact, innovative research. The FY 2018 OCRCP solicited innovative ideas that provide new paradigms, leverage critical resources, facilitate synergistic, multidisciplinary partnerships, and cultivate the next generation of investigators in ovarian cancer.</p> <p>FY 2022 Plans: This Congressional Special Interest initiative provided funds for ovarian cancer research. In striving to achieve the goal of eliminating ovarian cancer, the Ovarian Cancer Research Program (OCRCP) challenges the research community to address high impact, innovative research. The FY 2018 OCRCP solicited innovative ideas that provide new paradigms, leverage critical resources, facilitate synergistic, multidisciplinary partnerships, and cultivate the next generation of investigators in ovarian cancer.</p>	35.000	45.000
<p>Congressional Add: 328A - Peer- Reviewed Multiple Sclerosis Research</p> <p>FY 2021 Accomplishments: This Congressional Special Interest initiative provided funds for Multiple Sclerosis (MS) research. The mission of the Multiple Sclerosis Research Program (MSRP) is to support pioneering</p>	20.000	20.000

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022	
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / <i>Medical Technology Development</i>	Project (Number/Name) 300A / <i>CSI - Congressional Special Interests</i>	
B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	
concepts and high-impact research relevant to the prevention, etiology, pathogenesis, assessment, and treatment of MS. FY 2022 Plans: This Congressional Special Interest initiative provided funds for Multiple Sclerosis (MS) research. The mission of the Multiple Sclerosis Research Program (MSRP) is to support pioneering concepts and high-impact research relevant to the prevention, etiology, pathogenesis, assessment, and treatment of MS.			
Congressional Add: 335A - Peer-Reviewed Cancer Research FY 2021 Accomplishments: This Congressional Special Interest initiative provided funds for the study of cancers designated by Congress: adrenal cancer; bladder cancer; blood cancers; brain cancer; colorectal cancer; immunotherapy; Listeria-based regimens for cancer; liver cancer, lymphoma; melanoma and other skin cancers; mesothelioma; myeloma; neuroblastoma; pancreatic cancer; pediatric brain tumors; cancers in children, adolescences and young adults; and stomach cancer. The goal of the Peer-Reviewed Cancer Research Program is to improve the quality of life by decreasing the impact of cancer on Service members, their families, and the American public. FY 2022 Plans: This Congressional Special Interest initiative provided funds for the study of cancers designated by Congress: adrenal cancer; bladder cancer; blood cancers; brain cancer; colorectal cancer; immunotherapy; Listeria-based regimens for cancer; liver cancer, lymphoma; melanoma and other skin cancers; mesothelioma; myeloma; neuroblastoma; pancreatic cancer; pediatric brain tumors; cancers in children, adolescences and young adults; and stomach cancer. The goal of the Peer-Reviewed Cancer Research Program is to improve the quality of life by decreasing the impact of cancer on Service members, their families, and the American public.	115.000	130.000	
Congressional Add: 336A - Peer-Reviewed Lung Cancer Research FY 2021 Accomplishments: This Congressional Special Interest initiative provided funds for lung cancer research. The Lung Cancer Research Program is a broadly-competed, peer-reviewed research program with the goal to eradicate deaths from lung cancer to better the health and welfare of military Service members, Veterans, their families, and the American public. FY 2022 Plans: This Congressional Special Interest initiative provided funds for lung cancer research. The Lung Cancer Research Program is a broadly-competed, peer-reviewed research program with the goal to eradicate deaths from lung cancer to better the health and welfare of military Service members, Veterans, their families, and the American public.	20.000	20.000	
Congressional Add: 337A - Peer-Reviewed Orthopaedic Research	30.000	30.000	

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / <i>Medical Technology Development</i>	Project (Number/Name) 300A / <i>CSI - Congressional Special Interests</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022
<p>FY 2021 Accomplishments: This Congressional Special Interest initiative provided funds for orthopedic research to advance optimal treatment and rehabilitation from neuromusculoskeletal (bone, muscle, tendon, ligament, nerve, and cartilage) injuries sustained during combat or combat-related activities. The goal of the FY 2018 Peer-Reviewed Orthopaedic Research Program was to provide all Warriors affected by orthopedic injuries sustained in the defense of our Constitution the opportunity for optimal recovery and restoration of function.</p> <p>FY 2022 Plans: This Congressional Special Interest initiative provided funds for orthopedic research to advance optimal treatment and rehabilitation from neuromusculoskeletal (bone, muscle, tendon, ligament, nerve, and cartilage) injuries sustained during combat or combat-related activities. The goal of the FY 2018 Peer-Reviewed Orthopaedic Research Program was to provide all Warriors affected by orthopedic injuries sustained in the defense of our Constitution the opportunity for optimal recovery and restoration of function.</p>		
<p>Congressional Add: 338A - Peer-Reviewed Spinal Cord Research</p> <p>FY 2021 Accomplishments: This Congressional Special Interest initiative provided funds for spinal cord injury (SCI) research. The FY 2018 Spinal Cord Injury Research Program challenged the scientific community to design research that will foster new directions for and address neglected issues in the field of SCI research with particular focus on three areas: (1) pre-hospital, prolonged field care, en route care, and early hospital management of SCI; (2) development, validation, and timing of promising interventions to address consequences of SCI and to improve recovery; and (3) identification and validation of best practices in SCI.</p> <p>FY 2022 Plans: This Congressional Special Interest initiative provided funds for spinal cord injury (SCI) research. The FY 2018 Spinal Cord Injury Research Program challenged the scientific community to design research that will foster new directions for and address neglected issues in the field of SCI research with particular focus on three areas: (1) pre-hospital, prolonged field care, en route care, and early hospital management of SCI; (2) development, validation, and timing of promising interventions to address consequences of SCI and to improve recovery; and (3) identification and validation of best practices in SCI.</p>	40.000	40.000
<p>Congressional Add: 339A - Peer-Reviewed Vision Research</p> <p>FY 2021 Accomplishments: This Congressional Special Interest initiative provided funds for vision restoration research. The Peer-Reviewed Vision Research Program supported research targeting the causes, effects and treatments of eye damage, visual deficits due to traumatic brain injury (TBI) and diseases that, despite their different mechanisms of development, all have a common end result -- degeneration of the critical components of the eye and impairment or loss of vision. The results of this research are anticipated to support restoration and</p>	20.000	20.000

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / <i>Medical Technology Development</i>	Project (Number/Name) 300A / <i>CSI - Congressional Special Interests</i>
B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022
<p>maintenance of visual function to ensure and sustain combat readiness and directly benefit the lives of military, Veteran, and civilian populations.</p> <p>FY 2022 Plans: This Congressional Special Interest initiative provided funds for vision restoration research. The Peer-Reviewed Vision Research Program supported research targeting the causes, effects and treatments of eye damage, visual deficits due to traumatic brain injury (TBI) and diseases that, despite their different mechanisms of development, all have a common end result -- degeneration of the critical components of the eye and impairment or loss of vision. The results of this research are anticipated to support restoration and maintenance of visual function to ensure and sustain combat readiness and directly benefit the lives of military, Veteran, and civilian populations.</p>		
<p>Congressional Add: 352A - Traumatic Brain Injury/Psychological Health Research</p> <p>FY 2021 Accomplishments: This Congressional Special Interest initiative provided funds for research aimed to prevent, mitigate, and treat the effects of combat-relevant traumatic stress and combat-related traumatic brain injury (TBI) on function, wellness, and overall quality of life, including interventions across the deployment lifecycle for warriors, Veterans, family members, caregivers, and communities.</p> <p>FY 2022 Plans: This Congressional Special Interest initiative provided funds for research aimed to prevent, mitigate, and treat the effects of combat-relevant traumatic stress and combat-related traumatic brain injury (TBI) on function, wellness, and overall quality of life, including interventions across the deployment lifecycle for warriors, Veterans, family members, caregivers, and communities.</p>	175.000	175.000
<p>Congressional Add: 380A - Peer-Reviewed Breast Cancer Research</p> <p>FY 2021 Accomplishments: This Congressional Special Interest initiative provided funds for breast cancer research. The Breast Cancer Research Program challenged the scientific community to design research that addresses the urgency of ending breast cancer. Applications were required to address at least one of nine overarching challenges, which were focused on preventing breast cancer, identifying determinants of breast cancer initiation, risk, or susceptibility, distinguishing deadly from non-deadly breast cancers, conquering the problems of over-diagnosis and over-treatment, identifying what drives breast cancer growth and determining how to stop it, identifying why some breast cancers become metastatic, determining how to prevent recurrence, revolutionizing treatment regimens by replacing them with ones that are more effective, less toxic, and impact survival, and eliminating the mortality associated with metastatic breast cancer.</p> <p>FY 2022 Plans: This Congressional Special Interest initiative provided funds for breast cancer research. The Breast Cancer Research Program challenged the scientific community to design research that addresses the urgency of ending breast cancer. Applications were required to address at least one of nine overarching</p>	150.000	150.000

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022	
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / <i>Medical Technology Development</i>	Project (Number/Name) 300A / <i>CSI - Congressional Special Interests</i>	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2021	FY 2022
<p>challenges, which were focused on preventing breast cancer, identifying determinants of breast cancer initiation, risk, or susceptibility, distinguishing deadly from non-deadly breast cancers, conquering the problems of over-diagnosis and over-treatment, identifying what drives breast cancer growth and determining how to stop it, identifying why some breast cancers become metastatic, determining how to prevent recurrence, revolutionizing treatment regimens by replacing them with ones that are more effective, less toxic, and impact survival, and eliminating the mortality associated with metastatic breast cancer.</p>			
<p>Congressional Add: 390A - Peer-Reviewed Prostate Cancer Research</p> <p>FY 2021 Accomplishments: This Congressional Special Interest initiative provided funds for prostate cancer research. The vision for the Prostate Cancer Research Program (PCRP) was to conquer prostate cancer by funding research to eliminate death from prostate cancer and enhance the well-being of men experiencing the impact of the disease. To address the most critical current needs in prostate cancer research and clinical care, the PCRP solicited research applications addressing four overarching challenges: (1) distinguish aggressive from indolent disease in men newly diagnosed with prostate cancer; (2) develop strategies to prevent progression to lethal prostate cancer; (3) develop effective treatments and address mechanisms of resistance for men with high risk or metastatic prostate cancer; and (4) develop strategies to optimize the physical and mental health of men with prostate cancer. In addition, research projects were solicited in the areas of: data science and analytics; imaging and targeted radionuclide therapy; population science; precision medicine, screening, and surveillance; survivorship, including psychosocial impact on the patient and family; therapy and mechanisms of resistance and response; and tumor and microenvironment biology.</p> <p>FY 2022 Plans: This Congressional Special Interest initiative provided funds for prostate cancer research. The vision for the Prostate Cancer Research Program (PCRP) was to conquer prostate cancer by funding research to eliminate death from prostate cancer and enhance the well-being of men experiencing the impact of the disease. To address the most critical current needs in prostate cancer research and clinical care, the PCRP solicited research applications addressing four overarching challenges: (1) distinguish aggressive from indolent disease in men newly diagnosed with prostate cancer; (2) develop strategies to prevent progression to lethal prostate cancer; (3) develop effective treatments and address mechanisms of resistance for men with high risk or metastatic prostate cancer; and (4) develop strategies to optimize the physical and mental health of men with prostate cancer. In addition, research projects were solicited in the areas of: data science and analytics; imaging and targeted radionuclide therapy; population science; precision medicine, screening, and surveillance; survivorship, including psychosocial impact on the patient and family; therapy and mechanisms of resistance and response; and tumor and microenvironment biology.</p>		110.000	110.000
<p>Congressional Add: 392A - Gulf War Illness Peer-Reviewed Research</p>		22.000	0.000

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022	
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / <i>Medical Technology Development</i>	Project (Number/Name) 300A / <i>CSI - Congressional Special Interests</i>	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2021	FY 2022
FY 2021 Accomplishments: This Congressional Special Interest initiative provided funds for Gulf War Illness research. The vision for the Gulf War Illness Research Program was improving the health and lives of Veterans who have Gulf War Illness by funding research to identify effective treatments, improve clinical definition and diagnosis, and to better understand the underlying biology and symptoms of Gulf War Illness.			
FY 2022 Plans: N/A			
Congressional Add: 396A - Research in Alcohol and Substance Use Disorders		4.000	4.000
FY 2021 Accomplishments: This Congressional Special Interest initiative provided funds for alcohol and substance use disorders (ASUD) research. The goal of the Alcohol and Substance Abuse Disorders Research Program was to identify and develop new medications to improve treatment outcomes for ASUD, especially related to traumatic brain injury (TBI) and post-traumatic stress disorder (PTSD).			
FY 2022 Plans: This Congressional Special Interest initiative provided funds for alcohol and substance use disorders (ASUD) research. The goal of the Alcohol and Substance Abuse Disorders Research Program was to identify and develop new medications to improve treatment outcomes for ASUD, especially related to traumatic brain injury (TBI) and post-traumatic stress disorder (PTSD).			
Congressional Add: 400A - Peer-Reviewed Medical Research		370.000	370.000
FY 2021 Accomplishments: This Congressional Special Interest initiative provided funds for military-relevant research in Congressionally directed topic areas toward the goal of improving the health and well-being of all military Service members, Veterans, and beneficiaries. The 52 Congressionally-directed topics for were: Acute Lung Injury, Antimicrobial Resistance, Arthritis, Burn Pit Exposure, Cardiomyopathy, Cerebellar Ataxia, Chronic Migraine and Post-traumatic Headache, Chronic Pain Management, Congenital Heart Disease, Constrictive Bronchiolitis, Diabetes, Dystonia, Eating Disorders, Emerging Infectious Diseases, Endometriosis, Epidermolysis Bullosa, Focal Segmental Glomerulosclerosis, Fragile X, Frontotemporal Degeneration, Guillain-Barre Syndrome, Hepatitis B and C, Hereditary Angioedema, Hydrocephalus, Immunomonitoring of Intestinal Transplants, Inflammatory Bowel Diseases, Interstitial Cystitis, Lung Injury, Malaria, Metals Toxicology, Mitochondrial Disease, Musculoskeletal Disorders, Myotonic Dystrophy, Non-Opioid Pain Management, Nutrition Optimization, Pancreatitis, Pathogen-Inactivated Blood Products, Post-Traumatic Osteoarthritis, Pressure Ulcers, Pulmonary Fibrosis, Respiratory Health, Rett Syndrome, Rheumatoid Arthritis, Scleroderma, Sleep Disorders, Spinal Muscular Atrophy, Sustained-Release Drug Delivery, Tinnitus, Tissue Regeneration,			

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Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / <i>Medical Technology Development</i>	Project (Number/Name) 300A / <i>CSI - Congressional Special Interests</i>	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2021	FY 2022
Tuberculosis, Vaccine Development for Infectious Diseases, Vascular Malformations, and Women's Heart Disease. FY 2022 Plans: This Congressional Special Interest initiative provided funds for military-relevant research in Congressionally directed topic areas toward the goal of improving the health and well-being of all military Service members, Veterans, and beneficiaries. The 52 Congressionally-directed topics for were: Acute Lung Injury, Antimicrobial Resistance, Arthritis, Burn Pit Exposure, Cardiomyopathy, Cerebellar Ataxia, Chronic Migraine and Post-traumatic Headache, Chronic Pain Management, Congenital Heart Disease, Constrictive Bronchiolitis, Diabetes, Dystonia, Eating Disorders, Emerging Infectious Diseases, Endometriosis, Epidermolysis Bullosa, Focal Segmental Glomerulosclerosis, Fragile X, Frontotemporal Degeneration, Guillain-Barre Syndrome, Hepatitis B and C, Hereditary Angioedema, Hydrocephalus, Immunomonitoring of Intestinal Transplants, Inflammatory Bowel Diseases, Interstitial Cystitis, Lung Injury, Malaria, Metals Toxicology, Mitochondrial Disease, Musculoskeletal Disorders, Myotonic Dystrophy, Non-Opioid Pain Management, Nutrition Optimization, Pancreatitis, Pathogen-Inactivated Blood Products, Post-Traumatic Osteoarthritis, Pressure Ulcers, Pulmonary Fibrosis, Respiratory Health, Rett Syndrome, Rheumatoid Arthritis, Scleroderma, Sleep Disorders, Spinal Muscular Atrophy, Sustained-Release Drug Delivery, Tinnitus, Tissue Regeneration, Tuberculosis, Vaccine Development for Infectious Diseases, Vascular Malformations, and Women's Heart Disease.			
Congressional Add: 417A - Peer-Reviewed Alzheimer Research FY 2021 Accomplishments: This Congressional Special Interest initiative provided funds for Alzheimer's disease (AD) research. The FY Peer-Reviewed Alzheimer's Research Program (PRARP) sought to: (1) address the long-term consequences of traumatic brain injury (TBI) as they pertain to AD and AD-related dementias (ADRD); and (2) reduce the burden on AD/ADRD-affected individuals and caregivers, especially in the military and Veteran communities. FY 2022 Plans: This Congressional Special Interest initiative provided funds for Alzheimer's disease (AD) research. The Peer-Reviewed Alzheimer's Research Program (PRARP) sought to: (1) address the long-term consequences of traumatic brain injury (TBI) as they pertain to AD and AD-related dementias (ADRD); and (2) reduce the burden on AD/ADRD-affected individuals and caregivers, especially in the military and Veteran communities.		15.000	15.000
Congressional Add: 439A - Joint Warfighter Medical Research FY 2021 Accomplishments: The FY 2018 Joint Warfighter Medical Research Program (JWMRP) provides continuing support for promising projects previously funded by Congressional Special Interest initiatives. The		32.000	24.000

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022	
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / <i>Medical Technology Development</i>	Project (Number/Name) 300A / <i>CSI - Congressional Special Interests</i>	
B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	
focus is to augment and accelerate high priority DoD and Service medical requirements that are close to achieving their objectives and yield a benefit to military medicine. FY 2022 Plans: The FY 2018 Joint Warfighter Medical Research Program (JWMP) provides continuing support for promising projects previously funded by Congressional Special Interest initiatives. The focus is to augment and accelerate high priority DoD and Service medical requirements that are close to achieving their objectives and yield a benefit to military medicine.			
Congressional Add: 452A - Peer-Reviewed Reconstructive Transplant Research FY 2021 Accomplishments: This Congressional Special Interest initiative provided funds for reconstructive transplantation research. The Reconstructive Transplant Research Program (RTRP) focused on research in reconstructive transplantation for the refinement of approaches for hand, face, and other vascularized composite tissue allografts, which includes multiple body system components such as skin, muscle, tendon, nerves, bone, and blood vessels. In addition, the RTRP focused on research aimed toward improving access to reconstructive transplants, and on immunomodulation strategies that can reduce the need for immunosuppression regimens. FY 2022 Plans: This Congressional Special Interest initiative provided funds for reconstructive transplantation research. The FY 2018 Reconstructive Transplant Research Program (RTRP) focused on research in reconstructive transplantation for the refinement of approaches for hand, face, and other vascularized composite tissue allografts, which includes multiple body system components such as skin, muscle, tendon, nerves, bone, and blood vessels. In addition, the RTRP focused on research aimed toward improving access to reconstructive transplants, and on immunomodulation strategies that can reduce the need for immunosuppression regimens.	12.000	12.000	
Congressional Add: 454A - Orthotics and Prosthetics Outcomes Research FY 2021 Accomplishments: This Congressional Special Interest initiative provided funds for orthotics and prosthetics outcomes research. The goal of the FY 2018 Orthotics and Prosthetics Outcomes Research Program was to support research that evaluates the comparative effectiveness of orthotic and prosthetic devices using patient-centric outcomes for Service members and Veterans who have undergone limb amputation. The program focused on outcomes-based best practices through analysis of the merits of prosthetic and orthotic devices currently available, and not on the development of new, or the improvement of existing, technology. The program intent was to generate clinically useful evidence to enhance and optimize patient outcomes. FY 2022 Plans: This Congressional Special Interest initiative provided funds for orthotics and prosthetics outcomes research. The goal of the FY 2018 Orthotics and Prosthetics Outcomes Research Program was to support research that evaluates the comparative effectiveness of orthotic and prosthetic devices using patient-centric outcomes for Service members and Veterans who have undergone limb amputation. The program	15.000	20.000	

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022	
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / <i>Medical Technology Development</i>	Project (Number/Name) 300A / <i>CSI - Congressional Special Interests</i>	
B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	
focused on outcomes-based best practices through analysis of the merits of prosthetic and orthotic devices currently available, and not on the development of new, or the improvement of existing, technology. The program intent was to generate clinically useful evidence to enhance and optimize patient outcomes.			
Congressional Add: 456A - HIV/AIDS Program FY 2021 Accomplishments: This Congressional Special Interest initiative provided funds for HIV/AIDS research includes all medical research that attempts to prevent, treat, or cure HIV/AIDS, as well as fundamental research about the nature of HIV as an infectious agent and AIDS as the disease caused by HIV. FY 2022 Plans: This Congressional Special Interest initiative provided funds for HIV/AIDS research includes all medical research that attempts to prevent, treat, or cure HIV/AIDS, as well as fundamental research about the nature of HIV as an infectious agent and AIDS as the disease caused by HIV.	16.000	18.000	
Congressional Add: 459A - Peer-Reviewed Epilepsy Research FY 2021 Accomplishments: This Congressional Special Interest initiative provided funds for traumatic brain injury (TBI)-related epilepsy research. The Peer Reviewed Epilepsy Research Program supported studies to examine the interconnection between TBI and epilepsy in four scientific focus areas: (1) epidemiology; (2) markers and mechanisms of post traumatic epilepsy; (3) models of post-traumatic epilepsy; and (4) research into psychogenic (non-epileptic) seizures. FY 2022 Plans: This Congressional Special Interest initiative provided funds for traumatic brain injury (TBI)-related epilepsy research. The Peer Reviewed Epilepsy Research Program supported studies to examine the interconnection between TBI and epilepsy in four scientific focus areas: (1) epidemiology; (2) markers and mechanisms of post traumatic epilepsy; (3) models of post-traumatic epilepsy; and (4) research into psychogenic (non-epileptic) seizures.	12.000	12.000	
Congressional Add: 463A – Program Increase: Restore Core Research Funding Reduction (GDF) FY 2021 Accomplishments: This Congressional Special Interest initiative was directed toward DHP core research initiatives in PE 0603115. Funds supported medical technology development efforts in the areas of military operational medicine, combat casualty care, military infectious diseases, clinical and rehabilitative medicine, medical simulation and information sciences, and radiation health effects. FY 2022 Plans: This Congressional Special Interest initiative was directed toward DHP core research initiatives in PE 0603115. Funds supported medical technology development efforts in the areas of military operational	221.215	212.980	

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022	
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / <i>Medical Technology Development</i>	Project (Number/Name) 300A / <i>CSI - Congressional Special Interests</i>	
B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	
medicine, combat casualty care, military infectious diseases, clinical and rehabilitative medicine, medical simulation and information sciences, and radiation health effects.			
Congressional Add: 495 - Peer-Reviewed Tick-Borne Disease Research	7.000	7.000	
FY 2021 Accomplishments: This Congressional Special Interest initiative provided funds for tick-borne diseases research. The Peer Reviewed Tick-Borne Disease Research Program’s mission was to support research focused on understanding the pathogenesis of Lyme disease and other tick-borne illnesses and on delivering innovative solutions to prevent and better diagnose and treat their manifestations.			
FY 2022 Plans: This Congressional Special Interest initiative provided funds for tick-borne diseases research. The Peer Reviewed Tick-Borne Disease Research Program’s mission was to support research focused on understanding the pathogenesis of Lyme disease and other tick-borne illnesses and on delivering innovative solutions to prevent and better diagnose and treat their manifestations.			
Congressional Add: 496 -Trauma Clinical Research Program	10.000	10.000	
FY 2021 Accomplishments: This Congressional Special Interest initiative provided funds for advancing trauma clinical research. Through a competitive Request for Proposals (RFP) process, the Department of Defense (DoD) has created a coordinated, multi-institutional clinical research network of civilian and military trauma centers to address the military relevant priorities and gaps in trauma care. The Indefinite Deliverable Indefinite Quantity (IDIQ) contract established the Linking Investigations in Trauma and Emergency Services (LITES) trauma research network. The LITES network creates a standing research consortium of US trauma systems and centers with the capability to conduct prospective, multicenter, injury care and outcomes research of relevance to the DoD. The LITES network is led by the University of Pittsburgh and features nine partnering sites, and the network has to ability to expand or contract based on the research performed.			
FY 2022 Plans: This Congressional Special Interest initiative provided funds for advancing trauma clinical research. Through a competitive Request for Proposals (RFP) process, the Department of Defense (DoD) has created a coordinated, multi-institutional clinical research network of civilian and military trauma centers to address the military relevant priorities and gaps in trauma care. The Indefinite Deliverable Indefinite Quantity (IDIQ) contract established the Linking Investigations in Trauma and Emergency Services (LITES) trauma research network. The LITES network creates a standing research consortium of US trauma systems and centers with the capability to conduct prospective, multicenter, injury care and outcomes research of relevance to the DoD. The LITES network is led by the University of Pittsburgh and features nine partnering sites, and the network has to ability to expand or contract based on the research performed.			
Congressional Add: 501 - Peer-Reviewed Hearing Restoration Research (Army)	10.000	10.000	

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / <i>Medical Technology Development</i>	Project (Number/Name) 300A / <i>CSI - Congressional Special Interests</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022
<p><i>FY 2021 Accomplishments:</i> This Congressional Special Interest initiative provided funds to pursue promising, necessary research for treatment of burdensome and very prevalent auditory system injury. The vision of the Hearing Restoration Research Program is to improve the operational effectiveness, medial readiness and quality of life of Service members and Veterans with auditory system injuries. The mission of the program is to advance the science of hearing restoration by delivering groundbreaking research and solutions that remove barriers to successful treatment of auditory system injury.</p> <p><i>FY 2022 Plans:</i> This Congressional Special Interest initiative provided funds to pursue promising, necessary research for treatment of burdensome and very prevalent auditory system injury. The vision of the Hearing Restoration Research Program is to improve the operational effectiveness, medial readiness and quality of life of Service members and Veterans with auditory system injuries. The mission of the program is to advance the science of hearing restoration by delivering groundbreaking research and solutions that remove barriers to successful treatment of auditory system injury.</p>		
<p><i>Congressional Add:</i> 502 - CSI - Peer-Reviewed Kidney Cancer Research (Army)</p> <p><i>FY 2021 Accomplishments:</i> This Congressional Special Interest initiative provided funds for research into kidney cancer. The vision of the Kidney Cancer Research Program is to eliminate kidney cancer.</p> <p><i>FY 2022 Plans:</i> This Congressional Special Interest initiative provided funds for research into kidney cancer. The vision of the Kidney Cancer Research Program is to eliminate kidney cancer.</p>	50.000	50.000
<p><i>Congressional Add:</i> 503 - CSI - Peer-Reviewed Lupus Research (Army)</p> <p><i>FY 2021 Accomplishments:</i> This Congressional Special Interest initiative provided funds for research into lupus. The vision of the Lupus Research Program is to cure lupus through partnership of scientists, clinicians, and consumers.</p> <p><i>FY 2022 Plans:</i> This Congressional Special Interest initiative provided funds for research into lupus. The vision of the Lupus Research Program is to cure lupus through partnership of scientists, clinicians, and consumers.</p>	10.000	10.000
<p><i>Congressional Add:</i> 540A - Global HIV/AIDS Prevention (Navy)</p> <p><i>FY 2021 Accomplishments:</i> This Congressional Special Interest initiative provided funds for research for Global HIV/AIDS Prevention. The program is responsible for assisting foreign military partners with the</p>	8.000	10.000

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency	Date: March 2022
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Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / <i>Medical Technology Development</i>	Project (Number/Name) 300A / <i>CSI - Congressional Special Interests</i>
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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022
development and implementation of culturally focused, military-specific HIV/AIDS prevention, care, and treatment programs in more than 55 countries around the globe. FY 2022 Plans: This Congressional Special Interest initiative provided funds for research for Global HIV/AIDS Prevention. The program is responsible for assisting foreign military partners with the development and implementation of culturally focused, military-specific HIV/AIDS prevention, care, and treatment programs in more than 55 countries around the globe.		
Congressional Add: 660A - Tuberous Sclerosis Complex (TSC) FY 2021 Accomplishments: This Congressional Special Interest initiative provided funds for Tuberous Sclerosis Complex (TSC) research. The Tuberous Sclerosis Complex Research Program (TSCRCP) sought to support innovative research to improve the lives of individuals with TSC through understanding the pathogenesis and manifestations of TSC and developing improved diagnostic and treatment approaches. FY 2022 Plans: This Congressional Special Interest initiative provided funds for Tuberous Sclerosis Complex (TSC) research. The Tuberous Sclerosis Complex Research Program (TSCRCP) sought to support innovative research to improve the lives of individuals with TSC through understanding the pathogenesis and manifestations of TSC and developing improved diagnostic and treatment approaches.	8.000	8.000
Congressional Add: 790A - Peer-Reviewed Duchenne Muscular Dystrophy FY 2021 Accomplishments: This Congressional Special Interest initiative provided funds for Duchenne Muscular Dystrophy (DMD) research. DMD is caused by gene mutations in skeletal muscle proteins, and affects approximately 1 in 3,600 boys causing muscle degeneration and eventual death. FY 2022 Plans: This Congressional Special Interest initiative provided funds for Duchenne Muscular Dystrophy (DMD) research. DMD is caused by gene mutations in skeletal muscle proteins, and affects approximately 1 in 3,600 boys causing muscle degeneration and eventual death.	10.000	10.000
Congressional Add: 512 - Peer-Reviewed Melanoma Research	30.000	40.000

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / <i>Medical Technology Development</i>	Project (Number/Name) 300A / <i>CSI - Congressional Special Interests</i>
B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022
FY 2021 Accomplishments: This Congressional Special Interest initiative provided funds for Peer-Reviewed Melanoma Research. The program is responsible for innovative research that will impact the prevention, diagnosis, staging, and treatment of melanoma in the near and intermediate future.		
FY 2022 Plans: This Congressional Special Interest initiative provided funds for Peer-Reviewed Melanoma Research. The program is responsible for innovative research that will impact the prevention, diagnosis, staging, and treatment of melanoma in the near and intermediate future.		
Congressional Add: 513 - Chronic Pain Management	15.000	15.000
FY 2021 Accomplishments: This Congressional Special Interest initiative provided funds for Chronic Pain Management. The program is responsible to develop new approaches to alleviate Veterans' pain, which may result from spinal cord injury, burns, amputations, traumatic brain injury, cancer, or musculoskeletal conditions. The program explores ways to decrease medical and behavioral harms related to opioid use and misuse, improve access to effective complementary approaches to pain care, and help treatment options to address pain and improve function, among other areas.		
FY 2022 Plans: This Congressional Special Interest initiative provided funds for Chronic Pain Management. The program is responsible to develop new approaches to alleviate Veterans' pain, which may result from spinal cord injury, burns, amputations, traumatic brain injury, cancer, or musculoskeletal conditions. The program explores ways to decrease medical and behavioral harms related to opioid use and misuse, improve access to effective complementary approaches to pain care, and help treatment options to address pain and improve function, among other areas.		
Congressional Add: 514 - Combat Readiness Medical Research	10.000	10.000
FY 2021 Accomplishments: This Congressional Special Interest initiative provided funds for Combat Readiness Medical Research. This program focuses on research relating to forward-deployable solutions that can promptly address life threatening injuries and medical diagnostics, threats, and treatments, and medical threats and treatments for Service members in battlefield settings.		
FY 2022 Plans: This Congressional Special Interest initiative provided funds for Combat Readiness Medical Research. This program focuses on research relating to forward-deployable solutions that can promptly address life threatening injuries and medical diagnostics, threats, and treatments, and medical threats and treatments for Service members in battlefield settings.		
Congressional Add: 515 - Peer-Reviewed Pancreatic Cancer Research	15.000	15.000

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / <i>Medical Technology Development</i>	Project (Number/Name) 300A / <i>CSI - Congressional Special Interests</i>
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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022
<i>FY 2021 Accomplishments:</i> This Congressional Special Interest initiative provided funds for Peer-Reviewed Pancreatic Cancer Research. The program support research on the prevention, detection, diagnosis, and treatment of pancreatic cancer.		
<i>FY 2022 Plans:</i> This Congressional Special Interest initiative provided funds for Peer-Reviewed Pancreatic Cancer Research. The program support research on the prevention, detection, diagnosis, and treatment of pancreatic cancer.		
<i>Congressional Add:</i> 516 - Peer-Reviewed Rare Cancers Research	17.500	17.500
<i>FY 2021 Accomplishments:</i> This Congressional Special Interest initiative provided funds for Peer-Reviewed Rare Cancers Research. The program support research on the prevention, detection, diagnosis, and treatment of rare cancer.		
<i>FY 2022 Plans:</i> This Congressional Special Interest initiative provided funds for Peer-Reviewed Rare Cancers Research. The program support research on the prevention, detection, diagnosis, and treatment of rare cancer.		
<i>Congressional Add:</i> 517 - Peer-Reviewed Scleroderma Research	5.000	0.000
<i>FY 2021 Accomplishments:</i> Congressional Add		
<i>FY 2022 Plans:</i> N/A		
<i>Congressional Add:</i> 300A - Congressional Add - Brain injury and disease prevention research	61.682	60.000
<i>FY 2021 Accomplishments:</i> FY21 Congressional Add		
<i>FY 2022 Plans:</i> FY22 Congressional Add		
<i>Congressional Add:</i> 300A - Congressional Add - Clinical research	-	10.000
<i>FY 2022 Plans:</i> FY22 Congressional Add		
Congressional Adds Subtotals	1,763.897	1,772.980

C. Other Program Funding Summary (\$ in Millions)
N/A

Remarks

D. Acquisition Strategy
Research proposals will be solicited by program announcements resulting in grants, contracts, or other transactions.

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency										Date: March 2022		
Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0603115DHA / Medical Technology Development				Project (Number/Name) 238C / Air & Space Austere Environment Patient Care and Transport (AF)			
COST (\$ in Millions)	Prior Years (+)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
238C: Air & Space Austere Environment Patient Care and Transport (AF)	14.921	11.250	12.675	12.866	0.000	12.866	13.122	13.386	13.653	13.927	Continuing	Continuing

(+) The sum of all Prior Years is \$0.295 million less than the represented total due to several projects ending

A. Mission Description and Budget Item Justification

This project advances combat casualty care in the air through biomedical research into interventional strategies and technologies that mitigate the risks for additional insult due to aeromedical evacuation. It transitions promising Science and Technology (S&T) from PE 0602115DHA's Project Code 306D - Biomedical Impact and Readiness Optimization of Air & Space Operations, and civilian groups into knowledge and materiel products that promote the recovery and return to duty of injured or ill service members, from point of injury back to definitive care.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Air & Space Austere Environment Patient Care and Transport (AF)	11.250	12.675	12.866	0.000	12.866
Description: Advanced research and development to model, improve and optimize enroute care systems in multi-domain operations. Efforts include S&T to provide autonomous patient care, telemedicine and decision-assist algorithms, impact of transport on patient pathophysiology, and optimization of care provider performance and stabilization / resuscitation strategies to improve service member survival and return to duty.					
FY 2022 Plans: Continue efforts to develop military-relevant models of injury and clinical progression during enroute care, advancing technologies for autonomous patient care and decision-assist, equipment with reduced size, weight and power or cold-chain management requirements, as well as continue to optimize labor and resource requirements for future medical combat casualty care operations.					
FY 2023 Base Plans: Understanding the effects of multiple flights following impact and blast-induced traumatic brain injury on long-term outcomes, automated decision support, telemedicine, telementoring, telemonitoring (TM3) and advancing technologies for autonomous patient care and decision-assist.					
FY 2023 OCO Plans: N/A					
FY 2022 to FY 2023 Increase/Decrease Statement:					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / <i>Medical Technology Development</i>	Project (Number/Name) 238C / <i>Air & Space Austere Environment Patient Care and Transport (AF)</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Increase is due to inflation.					
Accomplishments/Planned Programs Subtotals	11.250	12.675	12.866	0.000	12.866

C. Other Program Funding Summary (\$ in Millions)										
Line Item	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete Total Cost
• BA-1, PE 0807714HP: <i>Other Consolidated Health Support</i>	-	-	-	-	-	-	-	-	-	-

Remarks
 Accomplishments: Transitioned technology to provide closed-looped control of oxygen delivery, investigated multi-channel infusion pump (MCIP), clinical evaluation of En Route Care outcomes, advanced telemedicine, telementoring, and telemonitoring (TM3), investigated En Route Care competencies, effects of multiple flights following impact and blast-induced Traumatic Brain Injury, effects of hypobaria following head trauma combined with hemorrhagic shock, and resuscitation strategies to improve outcomes from trauma and hemorrhagic shock.

D. Acquisition Strategy
 Air Force contracting, Interagency Agreements, and Inter-service Support Agreements with the U.S. Army, U.S. Navy and the Department of Homeland Security are used to support ongoing scientific and technical efforts within this program. These agreements are supplemented with Broad Area Announcements (BAA) and Intramural calls for proposals, which are used to award initiatives in this project following determinations of scientific and technical merit, validation of need, prioritization, selection and any necessary legal and / or regulatory approvals (IRB, etc.).

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency										Date: March 2022		
Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0603115DHA / Medical Technology Development				Project (Number/Name) 284B / Air & Space Physiology, Medicine and Human Performance (AF)			
COST (\$ in Millions)	Prior Years (+)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
284B: Air & Space Physiology, Medicine and Human Performance (AF)	11.156	10.418	11.122	11.471	0.000	11.471	11.700	11.933	12.172	12.415	Continuing	Continuing

(+) The sum of all Prior Years is \$0.205 million less than the represented total due to several projects ending

A. Mission Description and Budget Item Justification

This project enables, sustains, and optimizes performance of Airmen through the elevation and alleviation of health effects associated with Air Force (AF) operational missions. This work addresses operational environments such as the mitigation of stress in AF personnel, to include aircrew, care providers, aircraft maintainers, intelligence, surveillance and cyber operators, as well as remote piloted aircraft operators.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Air & Space Physiology, Medicine and Human Performance (AF)	10.418	11.122	11.471	0.000	11.471
Description: Advanced technology development to enable, sustain, and optimize cognitive, behavior and physiologic performance in high-priority career fields for the United States Air Force (USAF) and in multi-domain operations. The sub-project areas include cognitive and physiologic performance under operational and environmental stressors, detection and improvement of physiological performance, and safety via sensors and targeted conditioning, which includes training techniques for optimal performance.					
FY 2022 Plans: FY 2022 plans continue efforts as outlined in FY 2021. Specific focus includes updating air breathing standards for On-Board Oxygen Generating System (OBOGS) Aircraft to reduce UPEs and updating alignment criteria for Distributed Common Ground System (DCGS), Cyber, Surveillance, Intelligence, and Remotely Piloted Aircraft service members.					
FY 2023 Base Plans: To provide evidence-based test battery for physical attributes associated with G-performance, Fighter Aircrew Conditioning Program (FACP) update recommendations, Updated cognitive models associated with performance in DCGS environments, Modernized vision screening methodologies, and characterize the additive effects of the pilot flight ensemble and associated changes in the human response.					
FY 2023 OCO Plans:					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / <i>Medical Technology Development</i>	Project (Number/Name) 284B / <i>Air & Space Physiology, Medicine and Human Performance (AF)</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
N/A					
<i>FY 2022 to FY 2023 Increase/Decrease Statement:</i> Increase is due to inflation					
Accomplishments/Planned Programs Subtotals	10.418	11.122	11.471	0.000	11.471

C. Other Program Funding Summary (\$ in Millions)
N/A

Remarks
Accomplishments: Automated Vision Tester (AVT) software integrated into automated prototype and advanced .remote vision system medical vision standards, characterized neurocognitive and cardiac effects of sleep deprivation on altitude and G-tolerance, and GLOC detection algorithm development.

D. Acquisition Strategy
Air Force contracting, Interagency Agreements, and Inter-service Support Agreements with the U.S. Army, U.S. Navy and the Department of Homeland Security are used to support ongoing scientific and technical efforts within this program. These agreements are supplemented with Broad Area Announcements (BAA) and Intramural calls for proposals, which are used to award initiatives in this project following determinations of scientific and technical merit, validation of need, prioritization, selection and any necessary legal and / or regulatory approvals (IRB, etc.).

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / Medical Technology Development	Project (Number/Name) 285A / Operational Medicine Research & Development (Budgeted) (AF)
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
285A: Operational Medicine Research & Development (Budgeted) (AF)	17.469	0.232	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Operational Medicine project develops validated solutions for the delivery of preventative care, intervention and treatment to Active Duty members and DoD beneficiaries. The primary focus areas include physiological and psychological health. Sub-topics include resilience, personalized medicine, patient safety, and care coordination.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Operational Medicine Research & Development (Budgeted) (AF)	0.232	0.000	0.000	0.000	0.000
Description: Basic research initiatives are developed and translated into practice; advanced technology initiatives are focused on prevention and treatment of chronic disease such as obesity and diabetes.					
FY 2022 Plans: N/A					
FY 2023 Base Plans: N/A					
FY 2023 OCO Plans: N/A					
FY 2022 to FY 2023 Increase/Decrease Statement: Reduced funding due to realignment within Defense Health Program, Research, Development, Test and Evaluation (DHP RDT&E), Program Element (PE) 0603115DHA, Project Codes 285A, 308B, 238C, 284B, and 307B to focus on future readiness mission and operational medical capabilities required to support the warfighter.					
Accomplishments/Planned Programs Subtotals	0.232	0.000	0.000	0.000	0.000

C. Other Program Funding Summary (\$ in Millions)

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / <i>Medical Technology Development</i>	Project (Number/Name) 285A / <i>Operational Medicine Research & Development (Budgeted) (AF)</i>

C. Other Program Funding Summary (\$ in Millions)

Remarks

Accomplishments: Genetic risk factors for pulmonary disorders were investigated, development progressed on a self-repairing dental material, military separation and retirement practices were investigated by health care providers to minimize diabetes risk, and smart hydrogels were evaluated as a method for graft targeted immunotherapy in reconstructive transplantation.

D. Acquisition Strategy

Broad Area Announcements (BAA) and Intramural calls for proposals are used to award initiatives in this project following determinations of scientific and technical merit, validation of need, prioritization, selection and any necessary legal and / or regulatory approvals (IRB, etc.).

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / Medical Technology Development	Project (Number/Name) 307B / Air & Space Force Health Protection (AF)
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COST (\$ in Millions)	Prior Years (+)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
307B: Air & Space Force Health Protection (AF)	29.148	10.046	11.463	11.630	0.000	11.630	11.862	12.098	12.340	12.586	Continuing	Continuing

(+) The sum of all Prior Years is \$0.362 million less than the represented total due to several projects ending

A. Mission Description and Budget Item Justification

This project delivers improved capabilities across the full spectrum of Air Force (AF) operations in the areas of directed energy and occupational and environmental health. Research involves the assessment and implementation of innovative technologies that enable effective surveillance, detection, identification, and mitigation of hazardous chemical, biological, directed energy, and other radiological and physical hazards that present a health risk to our Airmen and threaten to degrade and disrupt operational readiness. The intent is to warn and protect AF operators, such as our high performance and high-altitude aircrews facing extreme environments.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
<p>Title: Air & Space Force Health Protection (AF)</p> <p>Description: Advanced research to develop and model exposures within the realms of Airman occupation, expeditionary medicine, medical countermeasures of directed energy, aircrew health, and CBRNE environments as it relates to health readiness. This project area seeks to deliver improved capabilities across the full spectrum of Air Force operations to enable force health protection.</p> <p>FY 2022 Plans: To analyze detected threats and stressors using human model development (an in silico / in vitro tool to understand the impact of environmental and chemical stresses on the human) enroute to utilizing mitigation strategies coordinated with the operational community.</p> <p>FY 2023 Base Plans: To field exposure sensor flow process screening through human health machine learning algorithms for: real-time performance predictions, integrate high throughput toxico kinetics framework, understand limits of detection in operational environment.</p> <p>FY 2023 OCO Plans: N/A</p> <p>FY 2022 to FY 2023 Increase/Decrease Statement:</p>	10.046	11.463	11.630	0.000	11.630

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / <i>Medical Technology Development</i>	Project (Number/Name) 307B / <i>Air & Space Force Health Protection (AF)</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Increase due to inflation					
Accomplishments/Planned Programs Subtotals	10.046	11.463	11.630	0.000	11.630

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

Accomplishments: Developed individual exposure health risk profiles associated with chemical and noise exposures, conducted COVID-19 aircraft decontamination efforts to understand aircraft contamination and disinfection optimization, advanced exposure assessment tools for Total Exposure Health, and CBRN health assessment and risk tool (CHART) upgrade.

D. Acquisition Strategy

Air Force contracting, Interagency Agreements, and Inter-service Support Agreements with the U.S. Army, U.S. Navy and the Department of Homeland Security are used to support ongoing scientific and technical efforts within this program. These agreements are supplemented with Broad Area Announcements (BAA) and Intramural calls for proposals, which are used to award initiatives in this project following determinations of scientific and technical merit, validation of need, prioritization, selection and any necessary legal and / or regulatory approvals (IRB, etc.).

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency										Date: March 2022		
Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0603115DHA / <i>Medical Technology Development</i>				Project (Number/Name) 308B / <i>Expeditionary Medicine Research & Development (Budgeted) (AF)</i>			
COST (\$ in Millions)	Prior Years (+)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
308B: <i>Expeditionary Medicine Research & Development (Budgeted) (AF)</i>	21.391	2.623	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

(+) The sum of all Prior Years is \$0.173 million less than the represented total due to several projects ending

A. Mission Description and Budget Item Justification

This project area identifies innovative techniques and technologies that can be employed by Air Force medics during prolonged field care operations. It includes technology to improve survivability and advance “zero-preventable deaths”. Sub-project areas include the development and validation of novel procedures, materials, techniques, and tools associated with expeditionary operations.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Expeditionary Medicine Research & Development (Budgeted) (AF)	2.623	-	-	-	-
Description: This project provides advanced technology development to improve regenerative medicine and stabilization in prolonged field care operations. Efforts will include enhanced clinical guidelines and concept technology for treatment of non-compressible torso hemorrhage, development and application of portable ventilation monitoring, and development of new life and limb salvage technologies.					
Accomplishments/Planned Programs Subtotals	2.623	-	-	-	-

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

Accomplishments: Therapies to restore peripheral nerve regeneration were evaluated, development progressed on a portable ventilation monitoring capability, surgical methods and therapeutics were assessed to assist in prolonged field care / delayed evaluation applications, a teleophthalmology (tele-optometry) protocol was developed for military ophthalmologists, and medicine stability in high humidity and extreme temperatures was evaluated.

D. Acquisition Strategy

Broad Area Announcements (BAA) and Intramural calls for proposals are used to award initiatives in this project following determinations of scientific and technical merit, validation of need, prioritization, selection and any necessary legal and / or regulatory approvals (IRB, etc.).

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency										Date: March 2022		
Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0603115DHA / Medical Technology Development				Project (Number/Name) 309A / Regenerative Medicine (USUHS)			
COST (\$ in Millions)	Prior Years (+)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
309A: Regenerative Medicine (USUHS)	25.909	10.413	10.621	10.833	0.000	10.833	11.051	11.271	11.496	11.724	Continuing	Continuing

(+) The sum of all Prior Years is \$0.342 million less than the represented total due to several projects ending

A. Mission Description and Budget Item Justification

The Center for Neuroscience and Regenerative Medicine (CNRM) brings together the expertise of clinicians and scientists across disciplines to catalyze innovative approaches to traumatic brain injury (TBI) research. CNRM Research Programs emphasize aspects of high relevance to military populations, with a primary focus on patients at the Walter Reed National Military Medical Center.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Center for Neuroscience and Regenerative Medicine (USUHS)	10.413	10.621	10.833	0.000	10.833
Description: The Center for Neuroscience and Regenerative Medicine (CNRM) brings together the expertise of clinicians and scientists across disciplines to catalyze innovative approaches to traumatic brain injury (TBI) research. CNRM Research Programs emphasize aspects of high relevance to military populations, with a primary focus on patients at the Walter Reed National Military Medical Center. The CNRM has established 11 research cores and funded 131 research projects.					
FY 2022 Plans: FY 2022 Plans: (1) Design and execute rigorous clinical trials of candidate therapeutics with potential for direct benefit to military service members with TBI. There are 7 randomized controlled trials ongoing or in late-stage development, and several more in the planning stages. All trials involve U.S. military service members with readiness-relevant health concerns related to TBI, such as post-traumatic headaches, sleep disorders, and mood dysregulation. This objective involves building and maintaining a network of site collaborators and staff at multiple military treatment facilities around the U.S. (2) Execute a major observational study on the effects of repeated subconcussive blast exposures sustained during military heavy weapons training. This ongoing study involves objective assessments of Navy SEALs, range safety officers, and unexposed controls at multiple time points to assess baseline, acute, subacute and chronic effects.					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / <i>Medical Technology Development</i>	Project (Number/Name) 309A / <i>Regenerative Medicine (USUHS)</i>

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
(3) Test 2 novel handheld devices designed for prolonged field care use by military pre-hospital providers. These include a) an ultralight intracranial hemorrhage detector that uses advanced infrared technology to localize life-threatening subdural and epidural hematomas without the need for a Computed tomography (CT) scanner; b) a fully self-contained tight seal burr hold device that will allow emergency treatment of life-threatening subdural and epidural hematomas in an austere environment by prehospital providers. These devices will be tested in a sheep model of subdural hematoma in collaboration with the Walter Reed Army Institute for Research (WRAIR) and the Johns Hopkins Applied Physics Lab.					
(4) Train future military TBI research leaders through a post-doctoral fellowship program in collaboration with the University of Maryland, direct mentoring of military researchers around the country, a weekly seminar series, and multiple other educational events.					
(5) Perform discovery research that lays a foundation for future clinical trials, including a) use of a military relevant TBI mouse model involving combined repetitive blasts, plus impact, plus chronic stress to test candidate therapeutics, b) discovery of new magnetic resonance imaging (MRI) methods to detect blast-related brain injury, which at present can only be assessed post-mortem, c) development and validation of blood and sweat-based biomarkers for objective assessment of TBI.					
(6) Provide efficient, high quality support services for CNRM researchers and collaborators: a) the clinical trials unit, including protocol development, regulatory, and monitoring services; b) informatics, including secure clinical data capture, robust data storage, and rigorous statistical analysis; c) biofluid core, including robust storage, distribution of samples to collaborators, and analyses, including high sensitivity biomarker studies in sweat, saliva and blood; d) program management, including personnel, financial, logistics, safety, and compliance activities.					
(7) Continuously communicate with stakeholders to refine focus areas, funding priorities, and collaborative opportunities.					
(8) Focus on improving diversity, equity and inclusion through a series of workshops, readings, and team activities.					
(9) Disseminate findings of CNRM research to military, medical, scientific, and lay communities via in-person events, social media, electronic communications, and peer reviewed publications.					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / <i>Medical Technology Development</i>	Project (Number/Name) 309A / <i>Regenerative Medicine (USUHS)</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
(10) Expand CNRM funding via external sources to support additional clinical trials, blast exposure studies, prolonged field care activities, and discovery research with a goal of doubling our current total funding by 2030. FY 2023 Base Plans: FY 2022 plans continue efforts as outlined in FY 2021. FY 2023 OCO Plans: N/A FY 2022 to FY 2023 Increase/Decrease Statement: Price adjustment for inflation.					
Accomplishments/Planned Programs Subtotals	10.413	10.621	10.833	0.000	10.833

C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
• BA-1, 0806721HP: <i>Uniformed Services University of the Health Sciences</i>	10.036	10.236	-	-	-	-	-	-	-	-	Continuing Continuing

Remarks
Provides funding to conduct Natural History study; Infrastructure to support the CNRM program; and salaries of neuroscience faculty and technical and administrative support personnel.

D. Acquisition Strategy
USUHS optimizes these research funds to achieve its research objectives, often in partnership and collaboration with funding received from other DoD and interagency sources through Interagency Agreements and inter-service Support Agreements, which may be executed via Federal assistance agreements or contracts.

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency										Date: March 2022		
Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0603115DHA / Medical Technology Development				Project (Number/Name) 373 / GDF - Medical Technology Development			
COST (\$ in Millions)	Prior Years (+)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
373: GDF - Medical Technology Development	401.932	5.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

(+) The sum of all Prior Years is \$5.000 million less than the represented total due to several projects ending

A. Mission Description and Budget Item Justification

Guidance for Development of the Force - Medical Technology Development provides funds for development of promising candidate solutions that are selected for initial safety and effectiveness testing in animal studies and/or small-scale human clinical trials regulated by the US Food and Drug Administration prior to licensing for human use. Medical technology development is managed by Joint Program Committees in the following areas: 1- Military Infectious Diseases research is developing protection and treatment capabilities for military relevant emerging infectious diseases and wound infections. 2- Military Operational Medicine research goals are to develop and validate medical countermeasures against operational stressors, prevent physical and psychological injuries during training and operations, and to maximize health, performance and readiness of Service members. 3- Combat Casualty Care research is optimizing survival and recovery in injured Service members across the spectrum of care from point of injury through en route and facilities care.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: GDF – Medical Technology Development	5.001	0.000	0.000	0.000	0.000
Description: Funds provide for the development of medical technology candidate solutions and components of early prototype systems for test and evaluation. Promising drug and vaccine candidates, knowledge products, and medical devices and technologies are selected for initial safety and effectiveness testing in small scale human clinical trials.					
FY 2022 Plans: N/A \$0					
FY 2023 Base Plans: N/A \$0					
FY 2023 OCO Plans: N/A \$0					
FY 2022 to FY 2023 Increase/Decrease Statement: Congressional Add-Restoral					
Accomplishments/Planned Programs Subtotals	5.001	0.000	0.000	0.000	0.000

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / <i>Medical Technology Development</i>	Project (Number/Name) 373 / <i>GDF - Medical Technology Development</i>

C. Other Program Funding Summary (\$ in Millions)
N/A

Remarks

D. Acquisition Strategy

Mature and demonstrate safety and effectiveness of medical procedures, medical devices, and drug and vaccine candidates intended to prevent or minimize effects from battlefield injuries, diseases, and extreme or hazardous environments. Milestone B packages will be developed to transition products into advanced development.

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency										Date: March 2022		
Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0603115DHA / Medical Technology Development				Project (Number/Name) 373A / GDF - MTD (Combat Casualty Care)			
COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
373A: GDF - MTD (Combat Casualty Care)	0.000	11.168	15.736	24.519	0.000	24.519	26.943	27.950	28.871	29.810	Continuing	Continuing

A. Mission Description and Budget Item Justification

This project supports Medical Technology Development (combat casualty care) efforts with the goal of optimizing Warfighter survival and recovery from combat-related injury in current and future operational scenarios for the acute and early management of combat-related trauma, including point of injury, en route, and facility-based care.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Joint Battlefield Healthcare (Formerly Combat Casualty Care)	11.168	15.736	24.519	0.000	24.519
Description: Joint Battlefield Healthcare (formerly Combat Casualty Care) medical technology development activities seek to drive medical innovation through development of knowledge and materiel solutions for the management of combat-related trauma.					
FY 2022 Plans: Joint Battlefield Healthcare (formerly Combat Casualty Care) medical technology development will focus on evaluating diagnostic tools and treatments designed for deployment during multi-domain operations, resource-limited conditions and prolonged care. Test effective critical care processes and technologies for severe casualties injured during large scale combat operations. These technologies include devices to treat tissue damage caused when blood supply returns to tissue after a period of oxygen deprivation, technologies for advanced hemorrhage control, novel blood products, technologies for autonomous vascular access, battlefield burn diagnostics and management, and advanced en route casualty treatment and management.					
FY 2023 Base Plans: Joint Battlefield Healthcare (formerly Combat Casualty Care) medical technology development will continue to focus on developing and transitioning emerging technologies to enable care in the areas of prolonged field care, pre-hospital tactical combat casualty care, battlefield traumatic brain injury/neurotrauma, burn injury, and en route care.					
FY 2023 OCO Plans: N/A					
FY 2022 to FY 2023 Increase/Decrease Statement:					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / <i>Medical Technology Development</i>	Project (Number/Name) 373A / <i>GDF - MTD (Combat Casualty Care)</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Funds moved from Project Code 373C to further support Joint Battlefield Healthcare (formerly Combat Casualty Care) technology development efforts to optimize survival and recovery from combat-related injury in current and future operational scenarios.					
Accomplishments/Planned Programs Subtotals	11.168	15.736	24.519	0.000	24.519

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

N/A

D. Acquisition Strategy

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / Medical Technology Development	Project (Number/Name) 373B / GDF - MTD (Military Operational Medicine)
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
373B: GDF - MTD (Military Operational Medicine)	0.000	23.255	19.046	34.150	0.000	34.150	32.426	33.152	33.815	34.492	Continuing	Continuing

A. Mission Description and Budget Item Justification

This project supports medical technology development efforts with the goal of maximizing the health, readiness, and performance of Service members and their families by the development of effective biomedical countermeasures against operational stressors, and prevention and treatment of physical and psychological injuries during training and operations.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Military Health and Recovery (Formerly Military Operational Medicine)	23.255	19.046	34.150	0.000	34.150
Description: Military Health and Recovery (Formerly Military Operational Medicine) medical technology and development efforts focus on the following areas: musculoskeletal injury prevention and treatment; blunt, blast, accelerative, and neurosensory injury prevention & readiness; psychological health and resilience; performance in extreme environments; and optimized cognition and fatigue mitigation.					
FY 2022 Plans: Efforts will focus on: injury prevention and recovery related to musculoskeletal injury; fatigue, cognitive health and performance; human operator health and performance in complex systems; operational systems toxicology for environmental health hazards; protection and performance sustainment in extreme environments; optimization of psychological health and resilience; and diagnosis & treatment of mental health disorders.					
FY 2023 Base Plans: Efforts will continue to focus on: injury prevention and recovery related to musculoskeletal injury; fatigue, cognitive health and performance; human operator health and performance in complex systems; operational systems toxicology for environmental health hazards; protection and performance sustainment in extreme environments; optimization of psychological health and resilience; and diagnosis & treatment of mental health disorders.					
FY 2023 OCO Plans: N/A					
FY 2022 to FY 2023 Increase/Decrease Statement:					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / <i>Medical Technology Development</i>	Project (Number/Name) 373B / <i>GDF - MTD (Military Operational Medicine)</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Funds moved from Project Code 373D to support additional Military Health and Recovery (Formerly Military Operational Medicine) musculoskeletal injury prevention & treatment technology development efforts.					
Accomplishments/Planned Programs Subtotals	23.255	19.046	34.150	0.000	34.150

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency										Date: March 2022		
Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0603115DHA / Medical Technology Development			Project (Number/Name) 373C / GDF - MTD (Medical Simulation & Training/Health Informatics)				
COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
373C: GDF - MTD (Medical Simulation & Training/Health Informatics)	0.000	12.613	13.044	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

A. Mission Description and Budget Item Justification

Conduct proof of technological feasibility studies and experiments and/or assessment of operability and producibility to address a military medical need identified through the Joint Capabilities Integration and Development System. Efforts are directed towards prototypes for field experiments and/or tests in a simulated environment, assessment/proof of feasibility or demonstration of utility/cost reduction that support medical simulation to increase military medical personnel's knowledge, skills and abilities to deliver combat casualty care support to manage patient injury and illness and to conduct patient movement from point of injury through role of care four.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Medical Simulation Technologies (Formerly Medical Simulation Technologies & Training/Health Informatics)	12.613	13.044	0.000	0.000	0.000
Description: Studies, investigations, and non-system specific technology effort focus on prototyping tissue models, technologies that simulate medical condition progress over time, technologies that simulate injury, technologies that replicate warfighter bio-physiology, and, technologies that simulate high-fidelity combat casualty care scenarios. Activities will continue to focus on tissue models that accurately simulate the feel, pliability, flexibility, and responsiveness of live tissue; technologies that simulate the degradation or worsening of a medical condition over time, as well as simulate the improvement of a medical condition over time; technologies that simulate injury, especially hemorrhage, fractures, and ocular damage; technologies that accurately reflect warfighter bodily characteristics and are rugged enough to simulate patient care and movement throughout the entire continuum of care; technologies that simulate combat scenarios to provide realistic environments; and, technologies that simulate patient movement through the continuum of care.					
FY 2022 Plans: N/A					
FY 2023 Base Plans: N/A					
FY 2023 OCO Plans:					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / <i>Medical Technology Development</i>	Project (Number/Name) 373C / <i>GDF - MTD (Medical Simulation & Training/Health Informatics)</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
N/A					
<i>FY 2022 to FY 2023 Increase/Decrease Statement:</i> Funds moved to Project Codes 373A and 373E to support Joint Battlefield Healthcare (formerly Combat Casualty Care) and Military Infectious Disease (wound infections) medical technology development efforts.					
Accomplishments/Planned Programs Subtotals	12.613	13.044	0.000	0.000	0.000

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / Medical Technology Development	Project (Number/Name) 373D / GDF - MTD (Clinical and Rehabilitation Medicine)
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
373D: GDF - MTD (Clinical and Rehabilitation Medicine)	0.000	13.040	14.980	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

A. Mission Description and Budget Item Justification

Clinical and rehabilitative medicine activities continue to develop knowledge and materiel products to reconstruct, rehabilitate, and provide care for injured Service member in the areas of neuromusculoskeletal injury, pain management, regenerative medicine, and sensory systems.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Clinical and Rehabilitation Medicine	13.040	14.980	0.000	0.000	0.000
Description: Clinical and rehabilitation medicine efforts will continue to support clinical trials in neuromusculoskeletal injuries to provide products and information solutions for diagnosis, treatment, and rehabilitation outcomes for Service-related injuries. Develop solutions (knowledge and materiel) for the diagnosis and alleviation of pain, restoration or regeneration of neuromusculoskeletal tissues, and sensory system (ocular) rehabilitation and treatment.					
FY 2022 Plans: N/A					
FY 2023 Base Plans: N/A					
FY 2023 OCO Plans: N/A					
FY 2022 to FY 2023 Increase/Decrease Statement: Funds moved to Project Code 373B (Military Health and Recovery (Formerly Military Operational Medicine)).					
Accomplishments/Planned Programs Subtotals	13.040	14.980	0.000	0.000	0.000

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / <i>Medical Technology Development</i>	Project (Number/Name) 373D / <i>GDF - MTD (Clinical and Rehabilitation Medicine)</i>

D. Acquisition Strategy
N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / Medical Technology Development	Project (Number/Name) 373E / GDF - MTD (Military Infectious Disease)
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
373E: GDF - MTD (Military Infectious Disease)	0.000	6.409	6.630	12.886	0.000	12.886	13.817	13.747	13.659	13.570	Continuing	Continuing

A. Mission Description and Budget Item Justification

This project supports medical technology development efforts toward the goal of preventing and treating infectious disease threats to eliminate their impacts on operational readiness.

B. Accomplishments/Planned Programs (\$ in Millions)

Title: Military Infectious Disease

Description: Military infectious disease activities to support efforts (including clinical) to develop innovative therapeutics and delivery technologies for combat wound infections. These efforts include accelerating promising prevention and treatment solutions to emerging infectious diseases (e.g., Dengue, chikungunya, Coronaviruses).

FY 2022 Plans:

Test lead drug candidates in healthy volunteers to determine drug pharmacology, safety, and effectiveness against emerging infectious diseases (EID). Transition the lead EID drug with improved safety, effectiveness and less frequent dosing to advanced development. Perform small studies in healthy volunteers to test safety, effectiveness and immunogenicity of immunoprophylactics (to prevent disease by immunity) against EID with down-selection and transition of the immunoprophylactics to advanced development. Manufacture EID vaccine candidate for clinical testing. Perform clinical testing of EID vaccine candidates for safety and efficacy in humans. Manufacture dengue vaccine candidate for clinical testing. Perform clinical testing of dengue vaccine candidates for safety and efficacy in humans. Support wound infections prevention and treatment medical technology and development efforts.

FY 2023 Base Plans:

Will continue to test lead drug candidates in healthy volunteers to determine drug pharmacology, safety, and effectiveness against emerging infectious diseases (EID). Will continue to support wound infections prevention and treatments research.

FY 2023 OCO Plans:

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Military Infectious Disease	6.409	6.630	12.886	0.000	12.886

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / <i>Medical Technology Development</i>	Project (Number/Name) 373E / <i>GDF - MTD (Military Infectious Disease)</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
N/A					
<i>FY 2022 to FY 2023 Increase/Decrease Statement:</i> Funds moved from 373C to support Military Infectious Diseases wound infections technology development efforts.					
Accomplishments/Planned Programs Subtotals	6.409	6.630	12.886	0.000	12.886

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0603115DHA / Medical Technology Development				Project (Number/Name) 373F / GDF - MTD (Radiological Health Effects)			
COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
373F: GDF - MTD (Radiological Health Effects)	0.000	0.501	0.518	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

A. Mission Description and Budget Item Justification

This project supports medical technology development efforts with the goal of pursuing the development of Food and Drug Administration (FDA) approved drugs, biologicals, and diagnostics (e.g., biodosimetry) to increase survival and decrease incapacity after acute radiation exposures.

B. Accomplishments/Planned Programs (\$ in Millions)

Title: Radiological Health Effects

Description: Develop in vivo models, assays, and other enabling technologies to support transition of candidate MCM(s) and to reduce risk during advanced development. This efforts will include the identification and characterization of biomarkers to establish novel druggable targets, understanding differences in species sensitivity to radiation, evaluating direct and indirect mechanisms of actions of high and low linear energy transfer (LET) radiation sources (e.g., neutrons, gamma), and, determining radiosensitivity and radioresistance of various systems/organs.

FY 2022 Plans:

Support research toward the development of Food and Drug Administration (FDA) approved drugs, biologicals, and diagnostics (e.g., biodosimetry) for acute radiation exposures to increase survival and decrease incapacity.

FY 2023 Base Plans:

N/A

FY 2023 OCO Plans:

N/A

FY 2022 to FY 2023 Increase/Decrease Statement:

Program combined with 373A Joint Battlefield Healthcare (formerly Combat Casualty Care)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
	0.501	0.518	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals	0.501	0.518	0.000	0.000	0.000

C. Other Program Funding Summary (\$ in Millions)

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / <i>Medical Technology Development</i>	Project (Number/Name) 373F / <i>GDF - MTD (Radiological Health Effects)</i>

C. Other Program Funding Summary (\$ in Millions)

Remarks

D. Acquisition Strategy

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency										Date: March 2022		
Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0603115DHA / Medical Technology Development				Project (Number/Name) 373G / GDF - MTD (Military Medical Photonics)			
COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
373G: GDF - MTD (Military Medical Photonics)	0.000	10.000	10.200	10.404	0.000	10.404	10.612	10.824	11.040	11.261	Continuing	Continuing

A. Mission Description and Budget Item Justification

This project supports Military Medical Photonics applied research with the goal of optimizing Warfighter survival and recovery from combat-related injury in current and future operational scenarios by driving medical innovation through development of knowledge and materiel solutions for the acute and early management of combat-related trauma, including point of injury, en route, and facility-based care.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Military Medical Photonics	10.000	10.200	10.404	0.000	10.404
Description: The Military Medical Photonics Program is an interdisciplinary program of physical and biological scientists, engineers, and physicians addressing diagnostic and therapeutic needs to support combat casualty care. Activities will continue to focus on diagnostic, imaging, and therapeutic studies. Specific efforts include: Photochemical tissue bonding for wound repair, passivation, and vein stiffening for abnormal connections between an artery and a vein; Optical applications for treatment and prevention of wound contamination and scarring, and to support wound healing and cartilage regeneration; Photonics-based diagnostics, including early detection of airway inhalation injury and implantable biomarker sensors; Investigations of photonics technologies to support the prolonged shelf life of human platelets; and Photobiomodulation to affect cognitive function.					
FY 2022 Plans: Conduct research toward the development of diagnostic, assessment and therapeutic solutions to optimize medical care of the Warfighter in current and future battlefield. Materiel and knowledge solutions will focus on innovative capabilities for use in the far forward environment that will cognitively and physically off load the medics in Large Scale Combat operations (LSCO). Focus areas will be cutting edge diagnostics that are of low cube and weight and can be used by minimally trained Warfighters at the point of injury, miniature and rugged imaging capabilities, and novel therapeutics for wound repair, vascular rupture diagnosis and repair. Photonics-based diagnostics will be integrated across the continuum of care, including early					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / <i>Medical Technology Development</i>	Project (Number/Name) 373G / <i>GDF - MTD (Military Medical Photonics)</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
detection of airway inhalation injury and implantable biomarker sensors and Photobiomodulation to affect cognitive function. <i>FY 2023 Base Plans:</i> Will continue research toward the development of diagnostic, assessment and therapeutic solutions to optimize medical care of the Warfighter in current and future battlefield. Materiel and knowledge solutions will focus on innovative capabilities for use in the far forward environment that will cognitively and physically off load the medics in Large Scale Combat operations (LSCO). Focus areas will be cutting edge diagnostics that are of low cube and weight and can be used by minimally trained Warfighters at the point of injury, miniature and rugged imaging capabilities, and novel therapeutics for wound repair, vascular rupture diagnosis and repair. Photonics-based diagnostics will be integrated across the continuum of care, including early detection of airway inhalation injury and implantable biomarker sensors and Photobiomodulation to affect cognitive function. <i>FY 2023 OCO Plans:</i> N/A <i>FY 2022 to FY 2023 Increase/Decrease Statement:</i> Increase due to inflation					
Accomplishments/Planned Programs Subtotals	10.000	10.200	10.404	0.000	10.404

<u>C. Other Program Funding Summary (\$ in Millions)</u> N/A <u>Remarks</u> <u>D. Acquisition Strategy</u> N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / Medical Technology Development	Project (Number/Name) 373H / GDF - MTD (Medical Advanced Technology)
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
373H: GDF - MTD (Medical Advanced Technology)	0.000	0.000	0.000	68.016	0.000	68.016	68.576	64.720	63.969	63.969	Continuing	Continuing

A. Mission Description and Budget Item Justification

Funding and mission realignment of US Army Medical Research and Development Command transfer to the Defense Health Agency in order to meet Congressional intent as outlined in NDAA 2019 (Section 711) and NDAA 2020 (Section 737) in support of Medical Systems, Advanced Technology & Development.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: GDF - MTD (Medical Advanced Technology)	0.000	0.000	68.016	0.000	68.016
Description: Programmatic transfer in accordance with the 711/737 US Army Medical Research and Development Command transfer to Defense Health Agency in support of Medical Systems, Advanced Technology & Development from Army PEs 0603002A & 0603115A.					
FY 2022 Plans: N/A					
FY 2023 Base Plans: Efforts will focus on Advanced Technology Development of Medical Technology.					
FY 2023 OCO Plans: N/A					
FY 2022 to FY 2023 Increase/Decrease Statement: Funding increase for this Project was due to transfer/realignment from Army.					
Accomplishments/Planned Programs Subtotals	0.000	0.000	68.016	0.000	68.016
	FY 2021	FY 2022			
Congressional Add: N/A	0.000	0.000			
FY 2021 Accomplishments: N/A					
FY 2022 Plans: N/A					
Congressional Adds Subtotals	0.000	0.000			

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / <i>Medical Technology Development</i>	Project (Number/Name) 373H / <i>GDF - MTD (Medical Advanced Technology)</i>
C. Other Program Funding Summary (\$ in Millions) N/A		
Remarks		
D. Acquisition Strategy N/A		

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / <i>Medical Technology Development</i>	Project (Number/Name) 378B / <i>CoE-Breast Cancer Center of Excellence (USUHS)</i>
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
378B: <i>CoE-Breast Cancer Center of Excellence (USUHS)</i>	29.843	10.685	10.898	11.116	0.000	11.116	11.339	11.566	11.797	12.033	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Breast Cancer CoE provides a multidisciplinary approach as the standard of care for treating breast diseases and breast cancer. This approach integrates prevention, screening, diagnosis, treatment and continuing care, incorporation of advances in risk reduction, biomedical informatics, tissue banking and translational research. The project is based on a discovery science paradigm, leveraging high-throughput molecular biology technology and our unique clinically well-characterized tissue repository with advances in biomedical informatics leading to hypothesis-generating discoveries that are then tested in hypothesis-driven experiments.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Breast Cancer Center of Excellence	10.685	10.898	11.116	0.000	11.116
<p>Description: The Readiness and Lethality of the Total Force is based in large part on personnel health. Nearly 20% of the active duty force is now female, and breast cancer is the number one cancer in active duty women, far surpassing all other causes of cancer in this population. The Breast Cancer CoE utilizes a multidisciplinary approach for researching breast diseases and breast cancer focused on the military at-risk active duty population in order to enhance Readiness of The Total Force. This multidisciplinary model integrates prevention, screening, early diagnosis, treatment and continuing care, but the project is further unique in the incorporation of advances in risk reduction, biomedical informatics, tissue banking and translational research. The project is based on a Discovery Science paradigm, leveraging high-throughput molecular biology technology and our unique clinically and pathologically well-characterized tissue repository with advances in biomedical informatics leading to hypothesis-generating discoveries that are then tested in hypothesis-driven experiments.</p> <p>In addition to the primary achievement of research objectives, the program educates Federal employees as a benefit to the public they serve through Federal service, through support to civil authorities, and in non-Federal professional and academic collaborations.</p> <p>FY21 Accomplishments:</p> <ul style="list-style-type: none"> - Accrued 307 breast patients to Breast CoE core protocols - Accrued 128 breast patients to the ORIEN research protocol - Acquired 3,428 new biospecimens at our Breast COE sites to the core tissue protocol - Utilized our biospecimens and data base in support of 28 publications from October 2020 to Present 					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / <i>Medical Technology Development</i>	Project (Number/Name) 378B / <i>CoE-Breast Cancer Center of Excellence (USUHS)</i>

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
<p>- Performed critical research on young women with breast cancer, and the demographic of African-American women with breast cancer, key cohorts affecting cancer as a readiness issue for the DoD</p> <p>- Developed additional research work with NCI regarding young women with breast cancer in relation to the active duty component</p> <p>PATENT: Recurrence Gene Signature Across Multiple Cancer Types. (International Application #: PCT/US19/49688; entered National Phase on March 3, 2021)</p> <p>Provisional Patent Application "Protein markers for the prognosis of breast cancer progression" Murtha Cancer Center/Research Program</p> <p>Provisional Patent Application "Protein markers for estrogen receptor (ER)-positive-like and estrogen receptor (ER)-negative-like breast cancer" Murtha Cancer Center/Research Program</p> <p>Provisional Patent Application "Protein markers for estrogen receptor (ER)-positive luminal a (LA)-like and luminal b1 (LB1)-like breast cancer" Murtha Cancer Center/Research Program</p> <p>FY 2022 Plans: FY 2022 plans continue efforts as outlined in FY 2021.</p> <p>The Program will complete the following:</p> <p>Objective 1: Identify and consent a minimum of 150 patients (to include patients at high risk for development of breast cancer) annually to the MCCRCP APOLLO germline sequencing research study, with special focus on active duty females as a Force Protection / Readiness sustainment issue to the DoD.</p> <p>Objective 2: Accrue over 500 patients annually to the "core" USUHS MCCRCP/BC-COE protocols by consenting patients at the main clinical sites, with the main site being the Murtha Cancer Center's Breast Center at WRNMMC, the military's largest and only NAPBC (National Accreditation Program for Breast Centers) approved breast center in the entire DoD MHS.</p> <p>Objective 3: Expand our breast tissue acquisition to include more military veterans, by acquiring tissues and enrolling veterans in our protocols who are receiving care at VA hospitals in Palo Alto (California), Durham</p>					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / <i>Medical Technology Development</i>	Project (Number/Name) 378B / <i>CoE-Breast Cancer Center of Excellence (USUHS)</i>

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
<p>(North Carolina), Puget Sound (Washington), and VA Dallas. Acquire through consented protocol acquisitions, over 5,000 specimens annually (neoplastic and non-neoplastic breast tissues and tumors, lymph nodes, metastatic deposits, blood and its components, bone marrow) on patients with all types of breast diseases and cancer with a new focus on veterans and being able to then look at any relationship between deployment history, environmental exposures, and their service record.</p> <p>Objective 4: Bank these biospecimens in the USUHS MCCRP's BC-COE Biorepository as the substrate for all molecular analyses carried out in USUHS MCCRP's BC-COE labs, as outlined in the USUHS MCCRP's BC-COE Core Protocols. Utilize this repository as the basis for intramural and extramural collaborations for secondary usage research.</p> <p>Objective 5: Because of the ongoing expansion into VA sites and as an extension of the continued modernization of our world-class biobank, develop additional new quality assurance programs and standard operating procedures for the Tissue Bank regarding these new elements and sites from the VA and others including conducting biospecimen science research.</p> <p>Objective 6: Conduct integrative profiling research for protein-expression based, clinically relevant breast cancer stratification.</p> <p>Objective 7: Breast cancer studies focused on two special patient groups bearing poor outcomes, who are enriched in the military active-duty military population: young women, and Black women.</p> <p>Objective 8: Focusing on samples from female veterans and female active duty service members with breast cancer, perform new heterogeneity studies, including cellular heterogeneity of tumor development environment and lineage heterogeneity within one physical cancer tumor.</p> <p>Objective 9: Studies on mechanistic understanding of breast cancer development from other perspectives, including genetic dispositions, exposure to environmental risks, access to healthcare, and impact of certain lifestyle factors as well as comorbidities.</p> <p>Objective 10: Breast cancer HER2 Targeted Therapy Optimization</p> <p>Objective 11: With the new addition of VA hospital sites for breast tissue collections and clinical data collation under research protocols, continued development and rollout of an informatics infrastructure system to support these new needs of BC-COE research.</p> <p>Objective 12: Analysis of the publicly available TCGA, CPTAC, and other large scale cancer study datasets.</p> <p>FY 2023 Base Plans: Continuation of objectives from FY22.</p> <p>FY 2023 OOC Plans:</p>					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / <i>Medical Technology Development</i>	Project (Number/Name) 378B / <i>CoE-Breast Cancer Center of Excellence (USUHS)</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
N/A					
<i>FY 2022 to FY 2023 Increase/Decrease Statement:</i> Pricing adjustment for inflation.					
Accomplishments/Planned Programs Subtotals	10.685	10.898	11.116	0.000	11.116

C. Other Program Funding Summary (\$ in Millions)
N/A

Remarks

D. Acquisition Strategy

USUHS optimizes these research funds to achieve its research objectives, often in partnership and collaboration with funding received from other DoD and interagency sources through Interagency Agreements and inter-service Support Agreements, which may be executed via Federal assistance agreements or contracts.

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency										Date: March 2022		
Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0603115DHA / Medical Technology Development				Project (Number/Name) 379B / CoE-Gynecological Cancer Center of Excellence (USUHS)			
COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
379B: CoE-Gynecological Cancer Center of Excellence (USUHS)	26.088	9.341	9.528	9.719	0.000	9.719	9.913	10.111	10.313	10.519	Continuing	Continuing

Note

The Gynecologic Cancer Center of Excellence (GYN-COE) utilizes a program project type of strategy with overarching objectives to advance knowledge, prevention strategies, companion biomarkers and assays, treatments and interventions across the continuum of care in gynecologic oncology. Our twelve program projects run in parallel rather than in sequence with advances implemented over five years rather than 12 months. Some subprojects target discovery investigations and mechanistic studies whereas others focus on clinical evaluations, population studies and further development leading to deployment. The introduction of new subprojects and maturation of other subprojects allows the GYN-COE to continue to emphasize military and clinical relevance, prioritize bench to bedside translation, and infuse in advances in science, medicine and technology to meet our objectives.

A. Mission Description and Budget Item Justification

The Gynecologic Cancer Center of Excellence (GYN-COE) is an integrated translational research program aimed at development of companion biomarkers and assays, clinical decision support tools, risk assessment algorithms, quality improvement initiatives, treatments, and interventions for patients with gynecologic tumors and cancers, among a growing proportion of active duty women in the Armed Services, veteran and retired populations. Molecular profiling of pre-cancerous and malignant lesions has also enabled development of diagnostic and chemo-preventive interventions across the most common pathologic uterine conditions, rare variants, and the aggressive and deadly metastatic and recurrent malignancies that affect women and corresponding readiness. The GYN-COE has been the leading research program in the U.S. to identify clinical features, biologic etiologies, and social determinants underlying racial and ethnic disparities in gynecologic cancers using population based as well as translational research methods. The GYN-COE program features both the largest tissue laser capture microscopy facility as well as the most robust mass spectrometry-based proteomics facility in the DOD, enabling the program to assess the generalized relevance of GYN-COE discoveries in other cancers that impact service members and readiness. The comprehensive research program supports the training of subspecialty gynecologic oncology surgeons, a fellowship program that has trained advanced pelvic surgeons to support wartime efforts for the past 50 years. The program also educates and trains medical students, interns and residents in women’s health, telemedicine, wellness, wound-healing, hemorrhage, infections, pain management, resistance, resilience, palliative care and evidence-based medicine. The program has partnered with the National Cancer Institute in its educational and investigative activities over the past 20 years becoming a pillar program for the Murtha Comprehensive Cancer Center and the Uniformed Services University. The GYN-COE has also strengthened cancer capabilities, advanced the federal precision oncology initiatives, contributed to the COVID-response, enabled delivery of equitable care to female service members, veterans and beneficiaries, and ensured readiness of the female fighting force by addressing their gender-specific medical conditions.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Gynecological Cancer Center of Excellence	9.341	9.528	9.719	0.000	9.719

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Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / <i>Medical Technology Development</i>	Project (Number/Name) 379B / <i>CoE-Gynecological Cancer Center of Excellence (USUHS)</i>

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
<p>Description: The Gynecological Cancer Center of Excellence focuses on characterizing the molecular alterations associated with benign and malignant gynecological disease and facilitates the development of novel early detection, prevention and novel biologic therapeutics for the management of gynecological disease. The GYN-COE leverages innovative research to enhance gynecologic cancer care from prevention to survivorship for service members, beneficiaries, and the civilian population.</p> <ul style="list-style-type: none"> • To use extraordinary analytical capabilities in sample preparations combined with micro-scaled proteogenomic analysis for development of companion diagnostics, theragnostics, prognostics and prediction models for provision of precision medicine to gyn cancer patients as well as agnostically to all patients through pan cancer discovery • The throughput of our analytical facility will open up opportunities to expand our capabilities for proteogenomic tissue profiling of biopsy sized specimens to support ancillary studies of drug response and resistance in clinical trial patients aimed at repurposing of FDA-approved drugs for pan cancer treatment in partnership with public, private, and industry organizations. • Use of our technologies to support proteogenomic characterization of the world’s most rare and yet most clinically devastating diseases in partnership with the Joint Pathology Center. • Deployment of our analytical expertise to support research involving COVID related threats, combat related disorders, and behavioral health disorders, such as PTSD and others that are prevalent in retired veterans. • To expand our racial disparities research using the PAIRED consortium to support investigation of any cancer type or other disease for which there are worse outcomes in minority populations. • To provide undergraduate and graduate medical training in advanced pelvic surgery and complex gynecologic conditions within the context of a specialized fellowship in gynecologic oncology that produces physician scientists fluent in the latest advances of precision medicine for gynecologic cancer patients • Continue to serve as the comprehensive cancer center for gynecologic oncology clinical trial patients of the National Institutes of Health and veterans from regional VA facilities • The Clinical Proteomics Platform in the GYN-COE processed and analyzed 2224 unique cancer specimens in 2019 with a variance of less than 10% <p>FY 2022 Plans: Will continue efforts from FY 2021. In addition, will continue to build on studies examining molecular determinants of recurrent versus non-recurrent disease and how distribution of disease and post-surgical tumor residual influences outcome. Deep proteogenomic analyses will extend current state of the art technologies to reveal clinically actionable data that improves outcomes. Investigations of cancer health disparities and</p>					

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Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / <i>Medical Technology Development</i>	Project (Number/Name) 379B / <i>CoE-Gynecological Cancer Center of Excellence (USUHS)</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
retrospective clinical and translational research will include collaborative development of companion assays, clinical support tools and predictive analytics for therapeutic efficacy, prognosis, and survivorship care planning. Racial disparities investigations will extend to utilization of resources from TDAN, APOLLO-5/-6/-7, MCCRP and the NCI National Clinical Trials Network. Building collaborations with military health agencies to increase active duty and veteran focused GYN-research. FY 2023 Base Plans: Will continue efforts from FY 2021 and FY 2022. In addition, we will advance optimization and deployment of companion assays, clinical support tools and predictive analytics to improve racial and cancer health equity, military readiness, capabilities, efficiency, and outcomes. FY 2023 OOC Plans: N/A FY 2022 to FY 2023 Increase/Decrease Statement: Pricing Adjustment.					
Accomplishments/Planned Programs Subtotals	9.341	9.528	9.719	0.000	9.719

C. Other Program Funding Summary (\$ in Millions)
N/A

Remarks

D. Acquisition Strategy
Disseminate medical knowledge products resulting from research and development through articles in peer-reviewed journals, revised clinical practice guidelines, and into training curriculum throughout the Military Health System, and other applicable means.

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency										Date: March 2022		
Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0603115DHA / Medical Technology Development				Project (Number/Name) 381 / CoE - Integrative Cardiac Health Care (USUHS)			
COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OOC	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
381: CoE - Integrative Cardiac Health Care (USUHS)	5.929	1.680	1.744	1.809	0.000	1.809	1.875	1.943	1.982	2.022	Continuing	Continuing

A. Mission Description and Budget Item Justification

The USUHS Integrative Cardiac Health Program is a Center of Excellence whose mission is to:

1. To address the gaps identified in the Cardiovascular Care Initial Capabilities Document (ICD) (CRM-2017.03.23)
2. Enhance the cardiovascular health and well-being of the Warfighter and the DoD community through innovative clinical research using precision techniques.
3. Identify precise strategies for early detection, monitoring and reduction of preclinical/clinical CV and related chronic disease risks for improved clinical outcomes.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Integrative Cardiac Health/Military Cardiovascular Outcomes Research	1.680	1.744	1.809	0.000	1.809
<p>Description: USUHS is a “central focal point for health-related education and training, research and scholarship, and leadership support to operational military units around the world” and is the ideal engine to establish a strategic partnership to address cardiovascular health.</p>					
<p>FY2021 Accomplishments (Selected): The MiCOR portfolio currently includes 19 total studies with two broad themes: 1. Prevention of cardiac events in ADSM (16 projects) 2. Evaluating cardiac impact of COVID-19 infection/vaccination (3 Projects) Major landmarks: - 5400 USNA midshipmen screened using novel electrocardiographic device in support of BUMED Sudden Cardiac Death Risk Assessment Project Authorization Letter. Serious cardiac abnormalities were identified in 0.46%. Cited in HASC preamble to NDAA for extension to other academies. Briefing Accessions Medical Standards Working Group scheduled for December 2021 to add enhanced cardiac screening to MEPS and DODMERB recruit screening, affecting 150,000 recruits annually. - Long Term Outcomes following Combat Injury- Retrospectively compared CV outcomes in 17,570 warfighters and demonstrated that combat injury is associated with significant increases in cardiac arrhythmias, hypertension, diabetes mellitus, and coronary artery disease. Additional grant funding from CDMRP for a prospective study sought; decision anticipated January 2022. -Peer-reviewed Papers Published: 56</p>					

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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
<p>-Books: 1 -Book Chapters: 7 -Invited Presentations: 5 -Scientific Conference Workshops/Panels: 4 -Scientific Conference Paper/Poster Presentations: 20 -Four studies completed enrolment in FY21 and are in final analysis. - Six studies in active enrollment.</p> <p>-Long Haul COVID randomized clinical trial of ivabradine in institutional review. -1,000,000 USAF EKGs transferred to DHA and currently under analysis for machine learning. -Sleep Disordered Breathing- Analysis of opioids and their impact on sleep disordered breathing has been completed and published. Analysis of the QT interval variability as the mortality predictor is 50% completed since January 2021. Expected completion Q4 FY2022.</p> <p><i>FY 2022 Plans:</i> Continue enrollment and conduct of study schedules for the six studies in the active phase. -Finalize analysis on the four studies in the post completion stage. Disseminate results accordingly to high impact journals. -Complete regulatory tasks (IRB, agreements, protocol development, etc.) for remaining studies in order for those studies to enter the active research phase. - Convene national committee of experts to formulate “Guidelines for the Cardiovascular Care of the Tactical Athlete” in collaboration with DHA, American Heart Association, and the American College of Cardiology. Tactical athletes include active duty military, astronauts, police officers, and firefighters. -Perform machine learning on 1,000,000 legacy electrocardiograms linked with MDR to identify novel biomarkers of cardiac risk. -Complete analysis of 5000 sleep polysomnograms for evaluation of electrocardiographic biomarker as predictor of death.</p> <p>- Post Covid vaccine myocarditis registry in IRB review. - 1,000,000 USAF EKGs transferred to DHA and currently under analysis for machine learning - Registry of cardiovascular electrophysiology procedures - Peer-reviewed Papers Published: 56 - Books: 1</p>					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / <i>Medical Technology Development</i>	Project (Number/Name) 381 / <i>CoE - Integrative Cardiac Health Care (USUHS)</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
- Book Chapters: 7 - Invited Presentations: 5 - Scientific Conference Workshops/Panels: 4 - Scientific Conference Paper/Poster Presentations: 20 FY 2023 Base Plans: FY23 plans continue efforts outlined in FY21 and FY22. FY 2023 OOC Plans: N/A FY 2022 to FY 2023 Increase/Decrease Statement: Pricing adjustment for inflation.					
Accomplishments/Planned Programs Subtotals	1.680	1.744	1.809	0.000	1.809

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

D. Acquisition Strategy

USUHS optimizes these research funds to achieve its research objectives, often in partnership and collaboration with funding received from other DoD and interagency sources through Interagency Agreements and inter-service Support Agreements, which may be executed via Federal assistance agreements or contracts.

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency										Date: March 2022		
Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0603115DHA / Medical Technology Development				Project (Number/Name) 382B / CoE-Pain Center of Excellence (USUHS)			
COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
382B: CoE-Pain Center of Excellence (USUHS)	9.508	1.945	2.014	2.084	0.000	2.084	2.156	2.230	2.277	2.327	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Pain Center of Excellence examines the relationship between acute and chronic pain and focuses on finding, implementing, and evaluating the most effective methods of relieving the acute pain caused by combat trauma and the effect pain has throughout the continuum of care to rehabilitation and reintegration. The Pain Center of Excellence is an integral part of the Defense and Veterans Center for Integrative Pain Management (DVCIPM) whose mission is to become a referral center that supports world-class clinical pain services, provides education on all aspects of pain management, coordinates and conducts Institutional Review Board-approved clinical research and Institutional Animal Care and Use Committee-approved basic laboratory and translational pain research, and serves as the advisory organization for developing enterprise-wide pain policy for the Military Health System. In FY 2015, management of the Pain CoE was transferred from Army to USUHS.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Pain Center of Excellence (USUHS)	1.945	2.014	2.084	0.000	2.084
Description: The Pain Center of Excellence examines the relationship between acute and chronic pain and focuses on finding, implementing, and evaluating the most effective methods of relieving the acute pain caused by combat trauma and its impact on rehabilitation and recovery. The center also supports knowledge translation activities that are aimed at integrating research findings into military medicine clinical practice and policy.					
In addition to the primary achievement of research objectives, the program educates Federal employees as a benefit to the public they serve through Federal service, through support to civil authorities, and in non-Federal professional and academic collaborations.					
Description: The Pain Center of Excellence examines the relationship between acute and chronic pain and focuses on finding, implementing, and evaluating the most effective methods of relieving the acute pain caused by combat trauma and its impact on rehabilitation and recovery. The center also supports knowledge translation activities that are aimed at integrating research findings into military medicine clinical practice and policy.					
In addition to the primary achievement of research objectives, the program educates Federal employees as a benefit to the public they serve through Federal service, through support to civil authorities, and in non-Federal professional and academic collaborations.					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / <i>Medical Technology Development</i>	Project (Number/Name) 382B / <i>CoE-Pain Center of Excellence (USUHS)</i>

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
<p>FY21 Accomplishments</p> <ol style="list-style-type: none"> 1. Provided pain management advisory support to Congressionally Directed Medical Research Programs (CDPRP) and Clinical & Rehabilitative Medicine (CRM RP). In accordance with the Memorandum of Agreement with Defense Health Agency, provided advisory to support to DHA Deputy Assistant Director Medical Affairs and DHA Pain Management Clinical Support Service. 2. Collaborated with DHA stakeholders and Military Health System providers to implement key metrics of pain management and their associated clinical decision support tools (e.g., Opioid Prescriber Monthly Trend Report, Look Up Tool, Look Up Tool Dashboard, Opioid Registry) to support enterprise-wide process improvement. 3. Successfully implemented the Established and integrated Opioid Education and Naloxone Dispensing (OEND) program in DHA as part of the Quadruple Aim Performance Process (QPP) Plan. This activity included implementation of the Train-the-Trainer program across several Markets and Military Treatment Facilities. As such, naloxone prescribing rates have significantly increased across the DoD. 4. Led revisions and updates to the DoD Opioid Prescriber Safety Training (OPST) mandated by the 2015 Presidential Memorandum; Addressing Prescription Drug Abuse and Heroin Use and required for all DoD opioid prescribers. DVCIPM was the primary content developer for the initial FY 2017 OPST and was subsequently tasked with leading the content updates and revisions for 2021. As of June 2021, over 48,000 DoD prescribers have completed this training; over 5000 prescribers to date in 2021 alone. 5. As the designated CoE for DoD pain management, served as lead for revisions to DHA-Procedural Instruction 6025.04 Pain Management and Opioid Safety, translating emerging medical evidence and standards of practice into DoD pain management and opioid safety policy. 6. Engaged in many service activities to support research training and development for USUHS medical students, DoD residents, and DHA providers. These activities included mentoring several USUHS Capstone students, resulting in many posters and publications; implementing a residency research program at Walter Reed National Military Medical Center (WRNMMC); advising many WRNMMC Anesthesiology residents on their research projects; and providing support for research development for several military anesthesiologists. 					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / <i>Medical Technology Development</i>	Project (Number/Name) 382B / <i>CoE-Pain Center of Excellence (USUHS)</i>

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
7. Obtained another large CDMRP grant with co-investigators from Johns Hopkins Applied Physics Laboratory and School of Nursing, Georgetown University, and multiple Military Treatment Facilities. The objective of the study is to examine disparities across the Military Health System in pain management, using an Intersectionalist Framework and Health Equity Measurement Framework.					
8. Obtained a grant subaward as Co-Investigator, with Cognitive Medical Systems as the prime, from USAMRDC to develop standards aligned remote control for commercially available ventilator and IV pump across the NETCCN architecture, and to inform future work regarding regulatory and/or safety requirements					
9. The Pain Registry Biobank, approved in FY 19, is a clinical data registry and tissue biobank for the advancement of pain-related research. This Biobank contains PASTOR survey data, the Defense and Veterans Pain Rating Scale (DVPRS), electronic health record data, and biospecimens, (blood and saliva) on targeted individuals eligible for care within the Military Health System. Biobank Sites at Walter Reed National Military Medical Center and Naval Medical Center San Diego are enrolling. Currently, there are 200 participants, and approx. 4000 frozen samples. Permission was recently obtained to collect consents virtually, and a process to document and verify COVID-19 exposure is being explored. Applications for use of the PR Biobank data and samples are being accepted, and will be reviewed by the PR Biobank Oversight Committee. Face to face enrollment was placed on hold in March 2020, but was resumed in early 2021.					
10. Published 20 articles across a range of high-impact journals related to rehabilitation, pain medicine, anesthesiology, and health services research.					
11. DVCIPM Director serving as the DoD representative to the National Institute of Health's (NIH) Interagency Pain Research Coordinating Committee (IPRCC) and the DoD Co-Chair for the HEC Pain Management Work Group.					
12. Improve transitions of care from DoD to VA for Service members with complex pain conditions by continuing to integrate common or complementary DoD/VA standards for pain-related data collection and reporting, opioid safety initiatives and practices, patient and provider education; leading DoD execution of DoD/VA Joint Executive Committee (JEC) action plans for opioid safety.					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / <i>Medical Technology Development</i>	Project (Number/Name) 382B / <i>CoE-Pain Center of Excellence (USUHS)</i>

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
13. Provided pain management functional support to DHA for the transition of the Pain Assessment Screening Tool and Outcomes Report (PASTOR) to the DHA Survey Portal. PASTOR is currently in use by over 240 DoD providers at 20 MTF pain management specialty clinics (as of 1Aug21).					
14. Completed the Joint Pain Education Program study funded by DHA.					
<p>FY 2022 Plans: FY 2022 plans continue efforts as outlined in FY 2021. FY 2022 plans continue efforts as outlined in FY 2021. And include the following activities: 1. Conduct implementation science research, provide subject matter expert support for a diverse portfolio of DoD/DHA pain management/opioid safety activities and initiatives, and facilitate the development of evidence-based policies. DVCIPM will establish an evidence-based, synthesized evaluation framework for patient/public health materials - the Health Information to Action Pathway (HITAP) Framework, (2) examine the patient-centeredness of patient/public health materials targeting pain management and opioid safety, and (3) provide suggestions for improvements.</p> <p>2. Support innovative research by continuing recruitment into the robust Pain Registry Biobank at both of its sites and conducting research that leverages PASTOR/PROMIS outcomes.</p> <p>3. To conduct rigorous research that supports healthcare optimization in pain management and analgesia. This includes collaborative studies with the Johns Hopkins Applied Physics Laboratory (APL) to conduct a pilot study and the Defense Health Management System (DHMS) on multiple studies. There are a range of different big-data studies that DVCIPM is currently engaged in including: examination of analgesia pathways across many different surgical procedures; evaluation of healthcare variability in naloxone, opioid, and non-opioid pain medication prescribing; identification of factors associated with dispense and effects of tramadol versus opioids; and other health services research.</p> <p>4. Conduct several studies aimed at evaluating anesthesiology and pain management training, workforce readiness, and career sustainment within medical school, residency, and practice settings</p> <p>5. Provide functional support to integrate PASTOR at all remaining MTF pain management specialty clinics.</p> <p>6. To conduct a study examining whether early treatment with NMDA-antagonist ketamine will decrease the likelihood of the development of chronic pain and PTSD using a mouse model.</p> <p>FY 2023 Base Plans:</p>					

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Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / <i>Medical Technology Development</i>	Project (Number/Name) 382B / <i>CoE-Pain Center of Excellence (USUHS)</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
FY 2023 plans continue efforts as outlined in FY 2022					
<i>FY 2023 OOC Plans:</i> N/A					
<i>FY 2022 to FY 2023 Increase/Decrease Statement:</i> Pricing adjustment for inflation.					
Accomplishments/Planned Programs Subtotals	1.945	2.014	2.084	0.000	2.084

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

D. Acquisition Strategy

USUHS optimizes these research funds to achieve its research objectives, often in partnership and collaboration with funding received from other DoD and interagency sources through Interagency Agreements and inter-service Support Agreements, which may be executed via Federal assistance agreements or contracts.

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency										Date: March 2022		
Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0603115DHA / <i>Medical Technology Development</i>				Project (Number/Name) 383A / <i>CoE-Prostate Cancer Center of Excellence (USUHS)</i>			
COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
383A: <i>CoE-Prostate Cancer Center of Excellence (USUHS)</i>	23.812	8.526	8.696	8.870	0.000	8.870	9.047	9.228	9.413	9.600	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Center for Prostate Disease Research (CPDR) is an interdisciplinary translational cancer research program of the Department of Surgery, Uniformed Services University of the Health Sciences (USUHS), the Walter Reed National Military Medical Center (WRNMMC), the Murtha Cancer Center, and the Urology Service at WRNMMC. The CPDR conducts state-of-the-art clinical and translational research with emphasis on precision medicine to enhance the readiness of active duty personnel juxtaposed with the continuum of medical care for military retirees and beneficiaries. The CPDR enriches the training of the next generation of physicians/scientists who directly benefit the quality, outcomes, and stability of the military health care delivery system. Ground-breaking discoveries through strong academic and clinical research; e.g., over 24 yrs. and 450 publications) have led to major advances in translational prostate cancer research and treatment. The CPDR integrates expertise of urologic and medical oncologists, cancer biologists, genitourinary pathologists, epidemiologists, bio-statisticians, medical technologists, research nurses, patient educators, bioinformaticians, and program management specialists. All these areas of expertise provide state-of-the-art resources for in-house and collaborative research in prostate cancer. The program is also committed to translational research training for future generations of physicians and scientists at leading DoD medical institutions (USUHS, WRNMMC, JPC, NMCS D, MAMC, SAMMC, and TAMC).

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: CoE-Prostate Cancer Center of Excellence (USUHS)	8.526	8.696	8.870	0.000	8.870
Description: The CPDR is at the forefront of “cutting-edge” clinical, basic science and epidemiologic research. The emphasis is on improving diagnosis, prognosis and treatment of prostate cancer involving new modalities such as MRI guided biopsy, gene-based biomarkers, and precision medicine strategies targeting causal gene alterations in prostate cancer. The CPDR multi-center database is a unique programmatic resource, enrolling over 28,500 DoD health care beneficiaries under suspicion for prostate cancer, with longitudinal follow up to 24 years. This database continues to highlight emerging issues in prostate cancer management such e.g., treatment outcomes, racial/ethnic differences, quality of life and discovery of novel molecular prognostic markers. In light of current issues related to overtreatment of early detected prostate cancers and poorly understood biology of prostate cancer, CPDR’s long-term biospecimen banks, high-impact discoveries and collaborations are leading towards better diagnostic and prognostic molecular markers and therapeutic targets with promise in improving the management of the disease. The CPDR’s health disparity research focus has uniquely benefited from studying a prostate cancer patient cohort, with a high representation of African American men, in an equal-access military health care system. Ground-breaking studies of the most validated prostate cancer gene, ERG, in over 1,500+ patients provide the first definitive information on prostate cancer biology underscoring racial/ethnic differences with potential to enhance personalized medicine. The CPDR’s state-of-					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / <i>Medical Technology Development</i>	Project (Number/Name) 383A / <i>CoE-Prostate Cancer Center of Excellence (USUHS)</i>

B. Accomplishments/Planned Programs (\$ in Millions)

the-art research infrastructure and framework is providing education and training for over 100 next generation physicians, scientists, medical and graduate students within DoD medical institutions.

FY 2022 Plans:

FY 2022 plans continue efforts as outlined in FY 2021.

Accomplishments (FY21):

- The CPDR-Clinical Research Program now at WRNMMC, combines a multidisciplinary approach of prostate cancer screening, data collection, clinical diagnosis, and treatment, education and counseling, and prostate disease clinical trial research in an efficient, personal and patient-oriented manner.
- The program continues to advance collaborations with NCI-Medical Oncologist to enhance treatment of advanced prostate cancer patients at WRNMMC.
- The CPDR has enrolled patients in clinical trials for more than two decades. Currently, there are 8 ongoing clinical trials ranging from disease prevention to quality-of-life.
- The CPDR provides for patient serum, urine, tissue bank and patient data registry by establishing and accelerating patient enrollment in the multicenter national database and biospecimen banking protocols.
- The CPDR bio-specimens banks currently house more than 240,000 units of various types of specimens which are driving engines for ground breaking research focusing on new diagnostic and prognostic bio-markers and therapeutic targets through in-house and collaborative efforts.
- The urine exosome prostate screening assay that earlier licensed the CPDR prostate cancer biomarkers is now reimbursed by Medicare, covered by CareFirst, BlueCross and BlueShield has reached FDA fast track (material product)
- The CPDR validated Genomic Health Inc., biopsy tissue prognostic assay was incorporated into the NCCN recommendations (material product)
- US Patent Applications filed on CPDR discoveries of prostate cancer genomic alterations of African American men (knowledge product)
- New serum-based biomarker panels were developed using proteome, lipidome and metabolome analytes by using artificial intelligence in collaboration with BERG Health and US Patent Applications were filed (knowledge product)
- New and more effective therapeutic derivatives of the compound ERGi-USUHS has been developed, a US Patent has been issued (material product)

FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / <i>Medical Technology Development</i>	Project (Number/Name) 383A / <i>CoE-Prostate Cancer Center of Excellence (USUHS)</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
<p>• CPDR had major contribution for the development of a new genetic risk prediction score and to the recommendations for new genetic testing panels, published in high impact journals including, Nature Genetics vol. 53:65-75, 2021 and J Clin Oncol vol. 38:2798-2811, 2020 (knowledge products)</p> <p>Knowledge Products (FY21 - 12 Publications); Podium Presentations (FY21 - 3 Presentations); Poster Presentations (FY21 - 13 Presentations) Training (FY21 - 9 Students, USUHS SOM, WRNMMC Urology resident, US Naval Academy) Materiel Products (FY21) Issued Patents and Patent Application (7) Issued U.S. Patent Genomic Rearrangements Associated with Prostate Cancer and Methods of Using the Same PCT/US2020/10,711,311B2, Issued: July 14, 2020 Issued Foreign Patent Prostate Cancer-Specific Alterations in ERG8 Gene Expression and Detection and Treatment Methods Based on Those Alterations: Canadian Patent 2,719,172, August 25, 2020 U.S. PCT (Non-Provisional) Patent Applications Markers for the Diagnosis of Prostate Cancer: USPA 16/91,775 June 26, 2020 Revised USUHS Form 3210 - March 2015 Page 4 of 11 Protein Panels for the Early Diagnosis/Prognosis and Treatment of Aggressive Prostate Cancer: USPA: 62/888,890 August 19, 2020 DNA Damage Repair Genes in Prostate Cancer, International PCT Application PCT/US21/21136 filed on March 5, 2021 (claiming priority to US Provisional 62/985,996 filed on March 6, 2020)</p> <p>FY 2023 Base Plans: Plans continue efforts as outlined in FY21 and FY22.</p> <p>FY 2023 OOC Plans: N/A</p> <p>FY 2022 to FY 2023 Increase/Decrease Statement: Pricing adjustment for inflation.</p>					
Accomplishments/Planned Programs Subtotals	8.526	8.696	8.870	0.000	8.870

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / <i>Medical Technology Development</i>	Project (Number/Name) 383A / <i>CoE-Prostate Cancer Center of Excellence (USUHS)</i>

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

D. Acquisition Strategy

USUHS optimizes these research funds to achieve its research objectives, often in partnership and collaboration with funding received from other DoD and interagency sources through Interagency Agreements and inter-service Support Agreements, which may be executed via Federal assistance agreements or contracts.

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0603115DHA / Medical Technology Development				Project (Number/Name) 431A / Underbody Blast Testing (Army)			
COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
431A: Underbody Blast Testing (Army)	68.611	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	-

A. Mission Description and Budget Item Justification

To better protect mounted warriors from the effects of underbody blast (UBB) caused by landmines or Improvised Explosive Devices (IEDs), UBB Testing medical research project will provide new data on the biomechanics of human skeletal response that occurs in an attack on a ground combat vehicle. The data will provide a biomedical basis for the development of a Warrior-representative blast test manikin (the Warrior Injury Assessment Manikin or WIAMan project) and the required biomedically-valid injury criteria that can be used in Title 10 Live Fire Test and Evaluation (LFT&E) to characterize dynamic events, the risk of injury to mounted warriors, and to support acquisition decisions. This new data will also benefit the overall DoD effort in vehicle and protection technology for the UBB threat. This work is needed to overcome the limitations of the current test manikin and injury criteria which were designed for the civilian automotive industry for frontal crash testing and as such are not adequate in the combat environment. The current manikins do not represent the modern Warrior and were not designed for the vertical acceleration environment associated with UBB events. Consequently, current LFT&E crew survivability assessment methodologies are limited in their ability to predict the types and severity of injuries seen in these events. Due to this technology gap, military ground vehicles are being fielded without fully defined levels of injury risk and crew survivability for UBB events. The data produced by this project will be used to satisfy a critical need for a scientifically valid capability for analyzing the risk of injury caused by UBB.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Underbody Blast Testing	0.000	-	-	-	-
Description: Testing will provide an understanding of the biomechanics of skeletal injuries that occur in a combat vehicle UBB event involving a landmine or IED, and the biomedical basis for the development of a Warrior-representative blast test manikin and associated biomedically-validated injury criteria that can be used to characterize dynamic events and injury risks for LFT&E crew survivability assessments and vehicle development efforts to better protect Warriors from UBB threats.					
Accomplishments/Planned Programs Subtotals	0.000	-	-	-	-

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

D. Acquisition Strategy

Produce BRC and human injury probability curves for human skeletal response and tolerance in the military UBB environment and transition them to the Program Execution Office for Simulation, Training and Instrumentation for use in the development of the WIAMan UBB test manikin and for general use in the research,

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / <i>Medical Technology Development</i>	Project (Number/Name) 431A / <i>Underbody Blast Testing (Army)</i>
development, test and evaluation community. Develop injury assessment reference curves for use with WIAMan manikin to support vehicle and protection technology acquisition decisions.		

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / Medical Technology Development	Project (Number/Name) 448A / Military HIV Research Program (Army)
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
448A: Military HIV Research Program (Army)	46.516	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

A. Mission Description and Budget Item Justification

This project funds research to develop candidate Human Immunodeficiency Virus (HIV) vaccines, to assess their safety and effectiveness in human subjects, and to protect the military personnel from risks associated with HIV infection. All HIV technology development is conducted in compliance with U.S. Food and Drug Administration (FDA) regulations. Evaluations in human subjects are conducted to demonstrate safety and effectiveness of candidate vaccines, as required by FDA regulation. Studies are conducted stepwise: first, to prove safety; second, to demonstrate the desired effectiveness of the vaccine in a small study (to demonstrate early proof-of-concept); and third, to demonstrate effectiveness in large, diverse human population clinical trials. All results are submitted to the FDA for evaluation to ultimately obtain approval (licensure) for medical use. This project supports studies for effectiveness testing on small study groups after which they transition to advanced developers for completion of effectiveness testing in larger populations. This program is jointly managed through an Interagency Agreement between the U.S. Army Medical Research and Materiel Command and the National Institute of Allergy and Infectious Diseases. This project contains no duplication with any effort within the Military Departments or other government organizations. The cited work is also consistent with the Assistant Secretary of Defense, Research and Engineering Science and Technology focus areas.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Military HIV Research Program	0.000	-	-	-	-
Description: The Military HIV Research Program aims to develop candidate HIV vaccines, to assess their safety and effectiveness in human subjects, and to protect the military personnel from risks associated with HIV infection. In addition, program also aims to develop other prevention and treatment strategies to mitigate the HIV epidemic globally. This project down-selects one or more vaccine candidates that are optimized through pre-clinical studies in non-human primates and conducts human clinical trials in Africa, Asia and the U.S. to test for safety and immunogenicity (ability to invoke an immune response), and early proof of concept efficacy testing.					
Accomplishments/Planned Programs Subtotals	0.000	-	-	-	-

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / <i>Medical Technology Development</i>	Project (Number/Name) 448A / <i>Military HIV Research Program (Army)</i>

D. Acquisition Strategy

Mature and demonstrate candidate HIV vaccines, prepare and conduct human clinical studies to assess safety and effectiveness of candidate HIV vaccines. All HIV technology development activities will be conducted in compliance with FDA regulations. Best selected candidates will be transitioned to advanced development through Milestone B.

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency										Date: March 2022		
Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0603115DHA / Medical Technology Development				Project (Number/Name) 478 / Applied Proteogenomics Organizational Learning and Outcomes (APOLLO) Consortium (USUHS)			
COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
478: Applied Proteogenomics Organizational Learning and Outcomes (APOLLO) Consortium (USUHS)	48.076	18.640	18.724	19.058	0.000	19.058	19.480	19.870	20.267	20.672	Continuing	Continuing

A. Mission Description and Budget Item Justification

DoD Cancer Moonshot - Applied Proteogenomics Organizational Learning and Outcomes (APOLLO) Consortium (USUHS)

DoD's Cancer Moonshot requirement is a mission of the Murtha Cancer Center (MCC) at USUHS under the authority of a tri-federal Memorandum of Agreement signed July 2016 by the Acting Assistant Secretary of Defense for Health Affairs (DoD), the Under Secretary of Health, Department of Veterans Affairs(VHA), and the Acting Director of the National Cancer Institute (NIH), for a tri-federal program of Clinical Proteogenomics Cancer Research. DoD's Cancer Moonshot promotes readiness and mission accomplishment of the active duty service member (ADSM) force, as well as military beneficiaries, retirees, and veterans. There are about 1,000 ADSMs who are stricken with a new cancer diagnosis annually, and MCC serves as the DoD's Health Affairs-approved Center of Excellence for cancer care and research for these ADSMs. MCCRP's mission is to bring translational cancer research to all patients in order to improve their health and mission performance, and to help prevent, screen, detect, and treat cancer; minimize side effects of cancer treatments; and return to duty ADSMs stricken with cancer, as well all other DoD beneficiaries. DoD's Cancer Moonshot initiative allows for the provision of state-of-the-art molecular analysis of tumors and blood of cancer patients which will result in increased force readiness through more targeted treatment of cancers with fewer side effects, as well as better screening for cancer risk and development.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: DoD Cancer Moonshot - Applied Proteogenomics Organizational Learning and Outcomes (APOLLO) Consortium (USUHS)	18.640	18.724	19.058	0.000	19.058
Description: DoD's Cancer Moonshot at USU's MCCRP is a research program consisting of two overall projects, the first known as APOLLO (Applied Organizational Learning and Outcomes), and the second as DoD Framingham. APOLLO is a novel high-throughput molecular analysis of every DNA (gene), RNA, and protein expression molecule in cancer patient tumors. Such analysis has never been done on a large scale across multiple cancer types, and small pilot studies demonstrate that the APOLLO project will result in unprecedented findings across all types of cancer (with specific focus on cancers of the greatest threat to ASDMs). These new findings will be identified by using state-of-the-art tissue collection procedures in the operating rooms of all patients undergoing cancer surgery at MCCRP collection protocol sites (e.g. Walter Reed, NMMC; NMC Portsmouth; NMC San					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / <i>Medical Technology Development</i>	Project (Number/Name) 478 / <i>Applied Proteogenomics Organizational Learning and Outcomes (APOLLO) Consortium (USUHS)</i>

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
<p>Diego; Womack AMC; Keesler AFB) and, then, sequencing the entire DNA genome and RNA sequence at USUHS, while analyzing the entire protein expression profile of these same cancers in MCCRPs Proteomics Laboratory, as well as other affiliated protein laboratories. The vast molecular data that will be derived from these analyses (in the terabyte and petabyte range and beyond) will be linked to clinical patient data as well as treatment outcomes data. These combined data sets will be housed in National Cancer Institute (NCI) secure cloud-based servers with restricted access for analytics by teams of bioinformatics experts (i.e., from government, university, and corporate entities) across the United States working on this endeavor. This complete bio molecular (global) expression profiling of thousands of cancers of all types seen in military treatment and other facilities will predictably result in a myriad of new discoveries regarding the way cancers develop, progress, respond to treatment, evade treatment, and spread. It also will result in new ways to combat cancers and minimize side effects of cancer treatment, as well as identify novel cancer screening and prevention opportunities, while focusing on militarily-relevant cancers and ADSMs with cancer, distinguishing it from any effort that might develop in the future in a civilian organization, as none of this scale exists today. There are now 7 specific APOLLO sub-projects, which are classified based on the organ type of cancer under study: APOLLO 1 = Lung cancer; APOLLO 2 = Gynecological cancer; APOLLO 3 = Prostate cancer; APOLLO 4 = Breast cancer; and APOLLO 5 = prospectively-collected VA, DoD, and NCI specimens and data for all organ sites, APOLLO 6: Pancreatic Cancer and APOLLO 7 (currently being developed): Testicular Germ Cell Tumors.</p> <p>Both of these projects in the DoD Cancer Moonshot program were specifically developed to focus on ADSM with cancer (readiness), utilize molecular laboratories that are American owned and operated (U.S. DoD and DOE), keep all sensitive deidentified clinical and molecular data on U.S. government computers and servers for maximum data security and analysis (through the NCI), and benefit the nation through any and all discoveries that are made.</p> <p>FY 2022 Plans: FY 2022 Plans continue efforts as outlined in FY 2021.</p> <p>Specifically, the APOLLO project will collect, process, and analyze cancer specimens from patients who have been diagnosed with cancer or at risk for cancer and who are eligible for and have consented to the protocols. All MCCRPs tissue source sites will be utilized which include 8 MTFs and MEDCENS in the MHS, as well as 3 VA sites and one civilian site. Active duty service members diagnosed with cancer at these MHS locations will be preferentially prioritized for offers of enrollment in APOLLO in order to make sure the DoD is providing state-of-</p>					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
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B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
<p>the-art research and clinical translational care opportunities to our active duty force to maintain and sustain the highest level of Readiness.</p> <p>The program will complete the following tasks:</p> <p>Task 1: Patients will be recruited and consented for this APOLLO protocol after being successfully recruited into and following the established procedures for the protocols: Establishment of a Tissue Repository for the Murtha Cancer Center Biobank (MCCB), Tissue and Blood Library Establishment for Molecular, Biochemical, and Histologic Study of Breast Disease, and Creation of a Blood Library for the Analysis of Blood for Molecular Changes Associated with Breast Disease and Breast Cancer Development.</p> <p>Task 2: Clinical data collection and quality assurance will follow the established procedures for the sample and data collection protocols. In addition, data may be obtained for the APOLLO study from the DoD Central Tumor Registry (OncoLog) or from the electronic medical records of APOLLO study participants.</p> <p>Task 3: Clinical pathologic slide imaging data will be collected for APOLLO study participants. Clinical pathologic slide imaging data will undergo quality assurance and de-identification procedures at WRNMMC and all other enrolling MTFs and MEDCENs.</p> <p>Task 4: Quality assurance and annotation of samples: The Joint Pathology Center (JPC) will continue to serve as the research pathology annotation center for the APOLLO project for the purpose of annotating pathological diagnoses, expanding pathologic characteristics of samples, and reviewing pathology data variables as defined in this protocol.</p> <p>Task 5: Genomic and proteomic profiling of samples will continue to be conducted by The American Genome Center (TAGC) at the USUHS in Bethesda, MD and the Murtha Cancer Center Research Program's Clinical Proteomics Platform (CPP) Consortium associated with the Gynecologic Cancer Center of Excellence (GYN-COE) at Inova Health System in Fairfax, VA and its associated laboratories at Northwestern University in Evanston, IL and Vanderbilt University in Nashville, TN.</p> <p>Task 6: Coded proteogenomic profiling (molecular) and sample sequencing data along with associated coded clinical data will continue to be transferred to an intermediate NCI protected server ("Jamboree site") and/or an NCI-approved government "Wiki" site at the NCI, and ultimately to the Genomic Data Commons (GDC) and Proteomic Data Commons (PDC). This same data will be securely transferred to certain partners who are assisting in performing integrative analyses of complex DNA, RNA, protein, and clinical data sets and/or in developing bioinformatics tools to do the same.</p>					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / Medical Technology Development	Project (Number/Name) 478 / Applied Proteogenomics Organizational Learning and Outcomes (APOLLO) Consortium (USUHS)

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
<p>Task 7: APOLLO 8 (7th Highest Cause of Cancer in Active Duty): Research on Malignant Brain Tumors (REMBRANT) Perform comprehensive neuropathologic examination of the available military glioblastoma (GBM) cases, and any available ante-mortem neurosurgical material for each decedent in the study. Perform genetic and proteomic characterization of the available military GBM cases to investigate potential associations with clinical outcomes.</p> <p>FY 2023 Base Plans: Continuation of above efforts from FY22.</p> <p>FY 2023 OOC Plans: N/A</p> <p>FY 2022 to FY 2023 Increase/Decrease Statement: Pricing adjustment for inflation.</p>					
Accomplishments/Planned Programs Subtotals	18.640	18.724	19.058	0.000	19.058

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

D. Acquisition Strategy

USUHS optimizes these research funds to achieve its research objectives, often in partnership and collaboration with funding received from other DoD and interagency sources through Interagency Agreements and inter-service Support Agreements, which may be executed via Federal assistance agreements or contracts.

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency										Date: March 2022		
Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0603115DHA / Medical Technology Development				Project (Number/Name) 479 / Framingham Longitudinal Study (USUHS)			
COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
479: Framingham Longitudinal Study (USUHS)	14.760	4.920	4.920	5.018	0.000	5.018	5.118	5.220	5.324	5.430	Continuing	Continuing

A. Mission Description and Budget Item Justification

DoD Cancer Moonshot Program - DoD Framingham

DoD's Cancer Moonshot requirement is a mission of the Murtha Cancer Center (MCC) at USUHS under the authority of a tri-federal Memorandum of Agreement signed July 2016 by the Acting Assistant Secretary of Defense for Health Affairs (DoD), the Under Secretary of Health, Department of Veterans Affairs(VHA), and the Acting Director of the National Cancer Institute (NIH), for a tri-federal program of Clinical Proteogenomics Cancer Research. DoD's Cancer Moonshot promotes readiness and mission accomplishment of the active duty service member (ADSM) force, as well as military beneficiaries, retirees, and veterans. There are about 1,000 ADSMs who are stricken with a new cancer diagnosis annually, and MCC serves as the DoD's Health Affairs-approved Center of Excellence for cancer care and research for these ADSMs. MCC's mission is to bring translational cancer research to all patients in order to improve their health and mission performance, and to help prevent, screen, detect, and treat cancer; minimize side effects of cancer treatments; and return to duty ADSMs stricken with cancer, as well all other DoD beneficiaries. DoD's Cancer Moonshot initiative allows for the provision of state-of-the-art molecular analysis of tumors and blood of cancer patients which will result in increased force readiness through more targeted treatment of cancers with fewer side effects, as well as better screening for cancer risk and development.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: DoD Cancer Moonshot Program - DoD Framingham Longitudinal Study	4.920	4.920	5.018	0.000	5.018
Description: DoD Framingham is a novel project that is enabled by the blood serum specimens stored at the DoD Serum Repository at the Armed Forces Health Surveillance Branch (AFHSB) in Silver Spring, Maryland. This facility stores blood serum drawn from over 10 million ADSMs who were required to undergo mandatory semiannual blood testing for the last 25 years, resulting in this repository with over 65 million blood serum specimens. MCC tumor registry data, which includes every ADSM who developed cancer while on active duty, is matched to data in the Serum Repository. This allows MCC to identify the blood serum of ADSMs who ultimately develop cancer at key times, i.e., before they had cancer, during their cancer treatment, and after their successful cancer treatment. Four different serum specimens (two before, one during, and one after cancer diagnosis and treatment) from every ADSM who developed certain types of cancer over a ten-year period of time are then sent to the Nation's foremost protein identification (mass spectroscopy) center, i.e., the Pacific Northwest National Laboratory (PNNL) run by the Department of Energy (DOE). This enables identification of the entire proteome circulating in the blood serum of these cancer patients before, during, and after cancer diagnosis. Comparing the proteomes will allow for identification of new protein biomarkers and indicators of treatment response and failure both of individual patients and across all patients with a specific type of cancer.					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / Medical Technology Development	Project (Number/Name) 479 / Framingham Longitudinal Study (USUHS)

B. Accomplishments/Planned Programs (\$ in Millions)

Smaller studies of this nature done by MCC researchers have proven that this is an effective strategy to identify novel diagnostic and treatment protein expression biomarkers that can be assayed in new blood tests for cancer. This project will do it “at scale”, i.e. in large numbers of active duty cancer patients (who are otherwise healthy and therefore do not have the “confounding” protein markers of old age, diabetes, and other medical issues). By using serums that go back many years before the ADMS was diagnosed with cancer, the earliest markers of cancer that will be identified, and assays will be performed by another U.S. governmental agency with the best protein detection and analysis tools in the world. Eight specific DoD Framingham sub-projects, classified based on the organ type of cancer, will be conducted: Framingham 1 = Oropharyngeal cancer; Framingham 2 = Lymphoma; Framingham 3 = Bladder cancer; Framingham 4 = Kidney cancer; and Framinghams 5 through 8 subtypes will be determined by MCC and NCI experts in the coming months.

Significant FY21 Accomplishments:

- A 13-protein classifier for early detection of Oropharyngeal Squamous Cell Carcinoma (Framingham 1) has been discovered through the collaboration with PNNL. This discovery indicates that the use of longitudinal samples in the other Framingham studies has significant potential to identify biomarkers for cancer detection and risk stratification.
- MCCRCP revised Framingham 3 to Melanoma to research the 2nd Highest Cause of Cancer in Active Duty personnel.
- Added Framingham 5 = Metastatic bone cancer.
- Added Framingham 6 = Pancreatic cancer.
- Sent over 1,800 serum samples from the DoDSR to PNNL for discovery-level mass spectrometry analysis and data interpretation

Both the APOLLO and Framingham projects in the DoD Cancer Moonshot program were specifically developed to focus on ADMS with cancer (readiness), utilize molecular laboratories that are American owned and operated (U.S. DoD and DOE), keep all sensitive de-identified clinical and molecular data on U.S. government computers and servers for maximum data security and analysis (through the NCI), and benefit the nation through any and all discoveries that are made.

FY 2022 Plans:

FY 2022 plans continue efforts as outlined in FY 2021.

FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / <i>Medical Technology Development</i>	Project (Number/Name) 479 / <i>Framingham Longitudinal Study (USUHS)</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
<p>The program will perform the following tasks.</p> <p>Task 1: The Department of Defense (DoD) Joint Pathology Center's (JPC) Automated Central Tumor Registry (ACTUR) and OncoLog systems will be queried for patients with identified cancer subject.</p> <p>Task 2: JPC will send the list of approximately 150 identified cancer patients to the AFHSD in order to requisition their sera. Sera from the year of diagnosis, two years pre-diagnosis, four years pre- diagnosis, and two years post-diagnosis will be requisitioned. Each of the 150 patients with identified cancer will be matched by age and sex to 150 controls who were cancer-free for the duration of their active component service, as well as free of autoimmunity, transplant, or immune suppression. Four longitudinal sera samples from each control will be requisitioned to correspond to the time points of the case sera.</p> <p>Task 3: The approximately 150 identified cancer subjects and 150 matched controls, each with up to four longitudinal serum samples for each Framingham project (for a total of about 1,200 serum samples for each Framingham project), will be sent to Pacific Northwest National Laboratory (PNNL) for comprehensive discovery-based quantitative proteomics measurements using the advanced LC-MS/MS platforms established at PNNL.</p> <p>Task 4: Dissemination of data to analysts at the PNNL and in conjunction with Murtha Cancer Center Research Program (MCCRP) at USUHS, who will perform at PNNL statistical analysis by the PNNL Bioinformatics team to examine whether any of the target peptides or group of peptides can be distinguished between the patients and their matched controls for each specific aim of this study.</p> <p>FY 2023 Base Plans: Continuation of FY22 plans.</p> <p>FY 2023 OOC Plans: N/A</p> <p>FY 2022 to FY 2023 Increase/Decrease Statement: Funding remains the same.</p>					
Accomplishments/Planned Programs Subtotals	4.920	4.920	5.018	0.000	5.018

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / <i>Medical Technology Development</i>	Project (Number/Name) 479 / <i>Framingham Longitudinal Study (USUHS)</i>

C. Other Program Funding Summary (\$ in Millions)
N/A

Remarks

D. Acquisition Strategy

USUHS optimizes these research funds to achieve its research objectives, often in partnership and collaboration with funding received from other DoD and interagency sources through Interagency Agreements and inter-service Support Agreements, which may be executed via Federal assistance agreements or contracts.

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0603115DHA / Medical Technology Development				Project (Number/Name) 499 / MHS Financial System Acquisition (DHA)			
COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
499: MHS Financial System Acquisition (DHA)	39.958	1.971	6.011	6.051	0.000	6.051	6.092	6.143	6.266	6.388	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Defense Health Program (DHP) appropriations' distribution and execution of funding is currently dispersed amongst multiple, disparate accounting systems, which is in direct conflict with Financial Improvement Audit Readiness (FIAR) guidance prioritizing the standardization of financial management systems and business processes. Currently DHP funding is distributed and executed across three disparate systems.

The current Defense Health Agency (DHA) structure hinders the overarching goal for audit ready initiatives and agency standard financial business processes. The identified solution for DHA to meet these challenges is to deploy a single operational financial management system (FMS) with minimal mission and business impact. DHA is researching a system that will accommodate standard and medically-required business processes. The goal is to transition financial operations to a platform that allows for consistency across the DHA, enabling standardized processes, data collection, and reporting.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: MHS Financial System Acquisition	1.971	6.011	6.051	0.000	6.051
Description: The goal is to transition financial operations to a platform that allows for consistency across the Defense Health Agency, enabling standardized processes, data collection, and reporting.					
FY 2022 Plans: Begin GFEB deployment to the Air Force.					
FY 2023 Base Plans: Begin GFEB deployment to the Air Force.					
FY 2023 OOC Plans: N/A					
FY 2022 to FY 2023 Increase/Decrease Statement: Deployment requirements for the Navy go down and shift towards the operation and maintenance. This program may increase in later years pending potential GFEB deployment to AF and acceleration in existing acquisitions.					
Accomplishments/Planned Programs Subtotals	1.971	6.011	6.051	0.000	6.051

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / <i>Medical Technology Development</i>	Project (Number/Name) 499 / <i>MHS Financial System Acquisition (DHA)</i>

C. Other Program Funding Summary (\$ in Millions)

<u>Line Item</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u> <u>Base</u>	<u>FY 2023</u> <u>OCO</u>	<u>FY 2023</u> <u>Total</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• BA 3: <i>PE 0807721</i> <i>Replacement & Modernization</i>	0.000	0.000	0.000	-	0.000	-	-	-	-	-	Continuing Continuing

Remarks

D. Acquisition Strategy

Acquisition Strategy is to be determined.

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0603115DHA / Medical Technology Development				Project (Number/Name) 504 / WRAIR Vaccine Production Facility Research (Army)			
COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
504: WRAIR Vaccine Production Facility Research (Army)	16.152	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

A. Mission Description and Budget Item Justification

The WRAIR Vaccine Pilot Bioproduction Facility (PBF) is the Department of Defense’s only facility capable of producing good manufacturing practices (GMP) quality biologic products for use in early phase clinical trials. The mission of the WRAIR PBF is to support the development and licensure of vaccines and relevant biologics critical to the global health of our Warfighters serving domestically or abroad in compliance with US Food and Drug Administration (FDA) regulations. Funding supports a baseline level of preparedness for vaccine production and improved response-time in the setting of known and emerging infectious disease threats needing a preventive countermeasure while working with a collaborative network of partners. This project supports vaccine development efforts of strategic importance to the DoD, including Service medical research and development programs, those of other DoD organization such as the Defense Threat Reduction Agency and the Defense Advanced Research Projects Agency, and pandemic biopreparedness for emerging infectious disease threats in the Global Health Security Agenda.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: WRAIR Vaccine Production Facility	0.000	-	-	-	-
Description: The WRAIR Vaccine Pilot Bioproduction Facility (PBF) will focus on the manufacture of early phase clinical materials for vaccine production from varied platforms, such as live virus, conjugates, recombinant proteins, DNA, and monoclonal antibody approaches that: (a) expand collaborative partnerships for product development that meet DoD requirements; (b) open active intramural-based discovery efforts of new products for development; and (c) initiate and extend strategic partnerships with external collaborators (Government and industry) to develop/co-develop potential new biologic approaches to pandemic disease preparedness.					
Accomplishments/Planned Programs Subtotals	0.000	-	-	-	-

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency										Date: March 2022		
Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0603115DHA / Medical Technology Development				Project (Number/Name) 506 / Health Research for Improved Medical Readiness and Healthcare Delivery (USUHS)			
COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
506: Health Research for Improved Medical Readiness and Healthcare Delivery (USUHS)	11.904	11.141	11.385	11.631	0.000	11.631	11.883	12.141	12.384	12.632	Continuing	Continuing

A. Mission Description and Budget Item Justification

The “Health Research for Improved Medical Readiness and Healthcare Delivery” program at USUHS is to answer fundamental questions of importance to the military mission of the Department of Defense in five (5) distinct portfolio areas: health services research, global health engagement, precision medicine, women’s health, and infectious disease clinical research.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Health Research for Improved Medical Readiness and Healthcare Delivery	11.141	11.385	11.631	0.000	11.631
Description: The objective of Health Services Research is to build capacity to conduct health services research (HSR) within the MHS. The program will address the lack of system-wide health care evidence to support policy and decision making and insufficient health services research capability to analyze MHS data for improving medical readiness and efficient, effective, quality and safe healthcare.					
CHSR FY2021 accomplishments (selected):					
• COVID-19 Analytics: provided enabling expertise of public health, health systems, disparities, and data analytics to the development of a national tool for tracking hotspots with the White House Office of S&T Policy; synthesized available US self-reported symptom trackers for the DHA; predictive modeling support with the Joint Staff and ARNORTH; and examination of the interplay between the military and civilian health systems in responding to COVID-19.					
• Other direct support: Government Accountability Office (consultation in study design, methodology, and data access/use for NDAA 2021), OSD-CAPE (examination of surge capacity in civilian healthcare system), OSD(HA) (Application of Kotter’s 8 Principles of Change Management to transform the MHS), Fisher House Foundation (Future Development of Intrepid Spirit Centers by Guard and Reserves), DHA High Reliability Network (push-pull knowledge translation platform), National Intrepid Center of Excellence and OSD(HA) (Development of an integrated practice unit tool for NICoE and the MHS).					
• Knowledge translation: High profile work on US child health affecting military readiness (doi: 10.1377/hlthaff.2020.00712) was a driving force behind the Congressional Research Service Report “Obesity in the					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / <i>Medical Technology Development</i>	Project (Number/Name) 506 / <i>Health Research for Improved Medical Readiness and Healthcare Delivery (USUHS)</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
<p>United States and Effects on Military Recruiting' (2020). Body of work on low-value healthcare services in the MHS informed goals of the 2022 National Defense Authorization Act (NDAA), charging</p> <ul style="list-style-type: none"> • the DHA with eliminating low value procedures from the MHS as well directly impacting change in T5 and in the current TRICARE consideration for reimbursement for Low Back Pain and Vitamin D screening. • Data workshops: Built capacity in the MHS and partner organizes by offering multiple training workshops including: Person-Data Environment (PDE, October 2020), DaVINCI DoD-VA joint clinical intelligence system (January 2021), What's New in the MHS Data Repository (MDR, August 2021), for over 100 nationwide, military and civilian registrants in each virtual workshop. <p>FY 2022 Plans: FY 2022 Plans: The CGHE Research Division has augmented and refined its GHERI grant distribution process to a point of readiness for ostensible upcoming funding cycles. CGHE plans to maintain such readiness to rapidly deploy CCMD GHE research priorities, scientific and programmatic review processes, and funding distribution mechanisms when authorized. Further, the CGHE Research Division plans to hold and facilitate a GHE research presentation and poster session at the upcoming 2022 MHSRS conference in Kissimmee, FL.</p> <p>Findings, recommendations, and process improvements resulting from the FRD and USAFRICOM studies will be generated and submitted during FY22.</p> <p>The Center for Military Precision Health (CMPH, formerly known as PRIMER) mission is to conduct innovative research applying genomic science, discoveries, and precision techniques to enhance the health, readiness and well-being of the Warfighter and DoD beneficiaries. CMPH provides standardized state of the art genome and molecular profiling services, genomic data analysis, and genomic data storage under DoD security and privacy compliance policies, addressing 8 separate DoD requirements across the MHS while also providing education in genomic information and performing clinical implementation research in the field of genomic medicine to inform policy and clinical practice guidelines for use of genomics in the MHS. CPMH enables HHS- and DOD-study subjects to participate in translational genomic research studies for human disease and conditions of posttraumatic stress disorder (PTSD), major depressive disorder, suicide-associated behaviors, cardiovascular disease, lung, prostate, breast and gynecological cancer and other human cancers, traumatic brain injury and dementia and other complex human diseases. To date The American Genome Center at CMPH has completed genomic and transcriptomic profiling on over 115,000 human samples. CMPH also supports the</p>					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / <i>Medical Technology Development</i>	Project (Number/Name) 506 / <i>Health Research for Improved Medical Readiness and Healthcare Delivery (USUHS)</i>

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
<p>Military Cardiovascular Outcomes Research (MiCOR) program to addresses gap areas identified in the Initial Capabilities Document for Cardiovascular Care with the first prospective genomic evaluation of cardiac arrest in the military (GEMINI study). Current collaborations with MICOR in focus areas of sudden death examinations and pharmacogenomics are also active to address preventative measures for soldier readiness and health. In response to the COVID-19 pandemic CMPH scientists are collaborating with The National Institute of Allergy and Infectious Diseases (NIAID)and the DOD study EPICC via IDCRP, to provide state of the art molecular profiling and analysis of individuals with COVID related illness. These program projects directly address risk factors and biomarkers for chronic and severe COVID-related health conditions after viral infection in young service members for readiness measures.</p> <p>The Military Women’s Health research program The Military Women’s Health Research Program (MWHRP) mission is to develop and guide best practices for the clinical care of women in the military system, through medical research. This research program will identify priorities that utilize novel and well-defined methods in the areas of personalized medicine and population science and focus on basic, clinical and translational research. The MWHRP research initiatives cover a broad spectrum of methods, including basic, translational, clinical, and/or population science that focus on diseases and disorders of particular relevance to the U.S. military health system and address key interests for the health of women. The MWHRP is a cooperative agreement under the direction of the PIs, Col Candy Wilson and Dr. Joan Wasserman. During this funding period, the MWHRC funded research on developing a comprehensive understanding of the female urinary diversion device (FUDD) available to military women when challenged with varying water and sanitation resources and, on urogenital health. Further, this project will test the utility of three, point-of-care devices packaged in an innovative trial product that contains a urogenital self-test as well as a treatment deployment kit that can be combined with a FUDD to increase prevention through early intervention and treatment of hygiene-related urogenital infections (bacterial vaginosis, vulvovaginal candidiasis, and urinary tract infections). This project is directed by Dr. Elizabeth Kostas-Polston, PI.</p> <p>Additionally, the MWHRP hosted a Women in Combat (WIC) summit that updated the previous USUHS CHAMP supported WIC in 2014 and Military Women’s Health Research Conference in 2016. This summit is under the direction of the PI, Col Candy Wilson. The WIC will inform strategic medical research priorities to support military women through the integration of multiple sources of expert opinions and research findings.</p>					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / <i>Medical Technology Development</i>	Project (Number/Name) 506 / <i>Health Research for Improved Medical Readiness and Healthcare Delivery (USUHS)</i>

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
<p>Infectious Disease Clinical Research Program designs and executes multicenter infectious diseases clinical research focusing on high-impact cohorts and interventional trials, to inform and improve care of the Warfighter. The focus is on emerging infections, antimicrobial resistance, and other high priority infections impacting military readiness in US and abroad. IDCRP will generate research evidence to inform warfighter care, develop DoD clinical practice guidance, assess cost effectiveness of interventions, and assist force health protection policy development.</p> <p>IDCRP FY21 Accomplishments: With the global COVID-19 pandemic starting in late Dec 2019, the Infectious Disease Clinical Research Program (IDCRP) has focused its efforts on therapeutic and prophylactics aimed at COVID-19. Two large scale, multi-site clinical studies were initiated with the COVID-19 focus – Epidemiology, Immunology and Clinical Characteristics of Emerging Infectious Diseases with Pandemic Potential (EPICC-EID) and Adaptive Clinical Trial Execution (ACTT).</p> <ul style="list-style-type: none"> - The Adaptive COVID-19 Treatment Trial (ACTT) is an adaptive platform trial and MHS-based network capability that evaluated the clinical efficacy of different investigational therapeutics for COVID-19. NIAID/DMID-led effort. 67 US and international sites. DoD sites: USUHS/IDCRP; MAMC; WRNMMC; NMCS; BAMC; NMCP; WAMC/Ft. Bragg; TAMC. - ACTT1: concept to publication < 3 months; foundational data supporting EUA (NEJM). ACTT2: completed enrollment 53 days, evidence of clinical benefit of baricitinib (NEJM). ACTT3: completed enrollment 98 days, IFN +RDV vs RDV. ACTT4: completed enrollment – RDV + steroids vs RDV + baricitinib, interim analysis; ACTT4 is the final of the ACTT trials (study close out). IDCRP is evaluating future SARS-CoV-2 therapeutic trial opportunities on a case-by-case basis. Lessons learned included: value of modeling projections to guide enrollment expectations, trial network efficiency (enrollment-to-site ratio). - The Epidemiology, Immunology and Clinical Characteristics of Emerging Infectious Diseases with Pandemic Potential (EPICC-EID) study is an ongoing prospective, longitudinal observational study of MHS beneficiaries involving systematic collection and analysis of clinical, demographic, lab data and clinical specimens. Selected recent progress and findings (7 manuscripts in print or under review, multiple presentations at national meetings; periodic newsletter report to senior leaders): - Assessment of variants of concern (VOC) in the MHS: Delta variants associated with higher viral load, noted to infect pediatric ages. Gamma variants found in vaccine breakthrough cases - Characterization of vaccine breakthrough infections, VOC and non-VOC; live viral shedding noted, hospitalization is rare but symptoms can be significant. 					

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B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
<ul style="list-style-type: none"> - Long-term natural immunity: 12-month antibody and T-cell responses are robust; long term antibody response and CD4+ response, but not cytotoxic T cell immunity, correlated with initial illness severity - Vaccine induced immunity: Vaccination after natural infection provides a larger magnitude of IgG response than vaccination or natural infection alone - Thrombotic complications of SARS-CoV-2 in the MHS: Viral load does not predict venous thrombo-embolism (VTE) in COVID-19 cases, whereas classic VTE risk factors do. - Assessment of the frequency and impact of “long COVID” among MHS beneficiaries; symptom persistence to 6 months in a subset of prospectively followed study participants. - - In addition to the COVID focus, several other protocols are underway or in late-stage development to address mitigation strategies for military relevant infectious disease threats: - - IDCRP-120 PAIVED, “Pragmatic Assessment of Influenza Vaccine Effectiveness in the DoD”. In this multi-year, open-label, randomized clinical trial, adult DoD beneficiaries are randomized to receive one of the three licensed vaccines and are followed over the season for development of incident, laboratory-confirmed influenza infections. Findings from this study will be used to assist with the selection of the optimal vaccine for the DoD. The trial also includes an immunogenicity substudy developed to compare humoral and cellular responses across vaccine products; year 4 enrollment set to begin. - - IDCRP-123 P4 - The P4 clinical trial will evaluate the efficacy of a prebiotic (Bimuno®), probiotic (Florastor®) and passive immunoprophylaxis (Travelan®) compared to placebo, for maintenance of gut health during short-term deployment and travel. The P4 study will evaluate the efficacy of nutraceuticals in maintaining gut health. The protocol has received external Scientific Review and IRB approval in the US as well as ethical approval in the UK, for this international trial. - - IDCRP-115 Treat TD 2.0 builds on the results of the original TrEAT TD study which compared single high-dose rifaximin (1650 mg) with loperamide to single-dose azithromycin or levofloxacin for treatment of acute watery diarrhea. Although high dose rifaximin was effective, a lower dose of the antibiotic would be optimal due to concerns about cost, potential side-effects, and antibiotic resistance. Therefore, TrEAT TD 2.0 evaluates the efficacy of single-dose rifaximin (550 mg) for treatment of acute watery diarrhea among military personnel deployed overseas compared to single-dose azithromycin (500 mg). This effort will benefit from partnerships 					

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B. Accomplishments/Planned Programs (\$ in Millions)

with DoD research labs both within and outside CONUS (e.g., NMRC, USUHS, WRAIR, AFRIMS, USAMRU-K, and NAMRU6) and the UK military for execution of the clinical trial and subsequent translational research efforts.

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- IDCRP-127 MAGI, clinical trial supported by NIAID DMID to assess whether the licensed meningococcal vaccine Bexsero can protect against infection with N. gonorrhoea (gonorrhoea, caused by a bacterium related to N meningitidis, the target of the vaccine). This multicenter, international clinical trial, collaboration between USUHS/IDCRP and US academic and international partner sites is open and enrolling subjects.

FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total

CHSR FY 2022 Goals

- Global Burden of Disease in the MHS: use claims data from the MHS Data Repository (MDR) in an epidemiological methods framework to examine the total burden of disease, measured in disability-adjusted life years (DALYs), across civilian and military MHS beneficiaries. The two study aims are: 1) measure and describe the diseases and injuries related to the loss of health in the MHS population; and 2) investigate changes in population-level health status over time. This includes engagement with USUHS-PRIMER, USUHS-MICOR and the NIH-National Heart, Lung, and Blood Institute (NIH) to determine the burden of heart disease and heart failure in the MHS, and with the NIH-National Center for Deafness and Communication Disorders to determine the burden of hearing loss and vestibular disorders in the MHS.
- Long Term Impacts of Military Health System Response to COVID-19: A Health Services Research Approach to Sustainable Process Improvements

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B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
<ul style="list-style-type: none"> • Integrated Practice Unit (IPU) assessment with NICOE: use the NICOE model of co-located, integrated care to develop an IPU tool; determine the model’s effectiveness in treating traumatic brain injury (TBI) and its long-term effects; and determine the best care pathways for treating differing clusters of TBI symptoms. • Morale, Manpower, and Medicine with University of Minnesota: assess the relationship between military medicine and military effectiveness, both in morale and as a soft power vs. peer and near-peer competitors. • Continued development of knowledge translation platform to provide push-pull capability for MHS leaders, clinical communities, and others. • Community building through the more than 130 member strong Health Services Research Interest Group and Value Based Care Journal Club, which is formed by intersectional MHS leaders and national public health leaders. • Develop and sustain Data Coordination Center for USUHS and other researchers needing to work with MHS data sets. • Emerging Priorities as will be determined by NDAA 2022, DHA, OSD(HA), and other Federal agencies • Global Burden of Disease Study • Long Term Impacts of Military Health System Response to COVID-19: A Health Services Research Approach to Sustainable Process Improvements • Capacity building through training and workshops • Community building through the Health Services Research Interest Group and Value Based Care Journal Club • Develop and sustain Data Coordination Center for USUHS and other researchers needing to work with MHS data sets. <p>Global Health Engagement (GHE) research is related to operational efforts and advanced technology development efforts that will meet the needs of the Joint Force in either improving the understanding and/or execution of DoD GHE, or utilizing DoD health research activities to engage a partner nation/partner nations in support of Combatant Command Campaign Plan objectives to further research. The GHE research needs of the warfighter are expressed by the regular demand signal of the Joint Force through the Joint Staff Surgeon’s Office and the Combatant Commands Surgeons’ Offices. CGHE continues to serve in a research monitoring role with ongoing FY16, FY18, and FY19 research programs under the Global Health Engagement Research Initiative (GHERI).</p> <p>FY 2023 Base Plans: CHSR FY 2023 Goals Continue Efforts as outlined in 2022, including:</p>					

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Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / <i>Medical Technology Development</i>	Project (Number/Name) 506 / <i>Health Research for Improved Medical Readiness and Healthcare Delivery (USUHS)</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
<ul style="list-style-type: none"> • Global Burden of Disease Study • Long Term Impacts of Military Health System Response to COVID-19: A Health Services Research Approach to Sustainable Process Improvements • Capacity building through training and workshops • Community building through the Health Services Research Interest Group and Value Based Care Journal Club • Develop and sustain Data Coordination Center for USUHS and other researchers needing to work with MHS data sets. <p>FY 2023 OOC Plans: N/A</p> <p>FY 2022 to FY 2023 Increase/Decrease Statement: Price adjusted for inflation.</p>					
Accomplishments/Planned Programs Subtotals	11.141	11.385	11.631	0.000	11.631

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

D. Acquisition Strategy

USUHS optimizes these research funds to achieve its research objectives, often in partnership and collaboration with funding received from other DoD and interagency sources through Interagency Agreements and inter-service Support Agreements, which may be executed via Federal assistance agreements or contracts.

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency										Date: March 2022		
Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0603115DHA / Medical Technology Development			Project (Number/Name) 507 / Brain Injury and Disease Prevention, Treatment and Research (USUHS)				
COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
507: Brain Injury and Disease Prevention, Treatment and Research (USUHS)	13.317	13.583	13.855	14.132	0.000	14.132	14.415	14.703	14.997	15.297	Continuing	Continuing

A. Mission Description and Budget Item Justification

This program supports drug discovery for chronic traumatic and encephalopathy/neurodegenerative disease.

B. Accomplishments/Planned Programs (\$ in Millions)

Title: Brain Injury and Disease Prevention, Treatment and Research

Description: Brain Injury and Disease Prevention, Treatment and Research is focused upon identifying drugs that will interfere with pathological tau prion formation in the brains of service members who are at risk for developing CTE and other prion-related neurodegenerative diseases. Service members who have served in combat and have received repeated impact and/or blast TBIs are at risk for developing chronic traumatic encephalopathy (CTE) and other neurodegenerative diseases which are associated with significant persistent behavioral/neurologic manifestations. Currently, there are no validated means for diagnosing these problems in living patients or drugs to effectively treat them. The overall mission of this program is to develop drug candidates that will effectively block the formation of brain tau prions that can be entered into clinical trials for the prevention and/or treatment of CTE and other neurodegenerative disorders in at-risk active duty and retired service members. Using human brain specimens, CTE has been now shown to qualify as a transmissible tau prion disorder. To date, over 320,000 novel chemical compounds have been tested for their ability to interfere with in vitro tau prion formation. Several active compounds have been identified and using medicinal chemistry, we have attempted to improve their bioavailability and lower toxicity profiles. Such candidate drugs are now being tested for efficacy in animal models of tau prion disorders. Newly developed techniques to identify the presence of tau prions in brain samples have been developed and have now been shown to be efficient and highly sensitive.

In addition to the primary achievement of research objectives, the program educates Federal employees as a benefit to the public they serve through Federal service, through support to civil authorities, and in non-Federal professional and academic collaborations.

FY 2022 Plans:

FY 2022 plans continue efforts as outlined in FY 2021.

FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
13.583	13.855	14.132	0.000	14.132

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / <i>Medical Technology Development</i>	Project (Number/Name) 507 / <i>Brain Injury and Disease Prevention, Treatment and Research (USUHS)</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
<p>While the COVID-19 pandemic continues to constrain our pace of research, we plan to screen an additional 500,000 chemical compounds for potential effects of tau prion formation. Compounds identified with such properties will undergo medicinal chemistry manipulation to enhance biologic efficacy. The newly developed, highly sensitive tau prion assay techniques will be used on currently available and newly obtained human brain specimens and animal models to identify the presence, distribution and time-course of tau prion involvement of the brain. We will continue to further develop animal models which overexpress human tau and employ these for pathogenesis, infectivity and drug efficacy studies. Animal models to be actively investigated include Tg12099(+/-) rats, hMAPT-KI mice, and ferrets. Recognizing the realities of working in the COVID era, activities towards obtaining fresh frozen brain specimens from deceased Service Members who developed CTE will be cautiously expanded in order to provide additional isolates in order to better characterize the nature of tau prions associated with this condition.</p> <p>FY 2023 Base Plans: Continue plans as outlined in FY 2022</p> <p>FY 2023 OOC Plans: N/A</p> <p>FY 2022 to FY 2023 Increase/Decrease Statement: Price adjustment for inflation.</p>					
Accomplishments/Planned Programs Subtotals	13.583	13.855	14.132	0.000	14.132

<p>C. Other Program Funding Summary (\$ in Millions) N/A</p> <p>Remarks</p> <p>D. Acquisition Strategy USUHS optimizes these research funds to achieve its research objectives, often in partnership and collaboration with funding received from other DoD and interagency sources through Interagency Agreements and inter-service Support Agreements, which may be executed via Federal assistance agreements or contracts.</p>

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0603115DHA / Medical Technology Development				Project (Number/Name) 508 / Psychological Health and Resilience (USUHS)			
COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
508: Psychological Health and Resilience (USUHS)	7.000	7.140	7.283	7.428	0.000	7.428	7.577	7.729	7.884	8.042	Continuing	Continuing

A. Mission Description and Budget Item Justification

The “Psychological Health and Resilience” program at USUHS is designed to answer fundamental questions of importance to the military medical mission of the Department of Defense in the areas of prevention, treatment and recovery of warfighters and families in behavioral and mental health, which are critical to force health and readiness. Research is necessary to guide policy and ensure optimal delivery of behavioral health training and services across the continuum of care and deployment cycle. Threats addressed by this research component include post-traumatic stress disorder (PTSD), suicide, family separation, and family violence.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
<p>Title: Psychological Health and Resilience</p> <p>Description: STARRS-LS, the longitudinal successor to the groundbreaking Army STARRS research conducted from 2009 to 2015, is the largest study of military suicide ever undertaken, and in addition has yielded a wealth of information about a variety of other health issues relevant to the military. STARRS-LS seeks to extend the original effort by continuing to follow the original participants, expanding the Historical Administrative Data Study and using Big Data techniques to develop knowledge from it, and by combining survey and health outcome data with genetic analyses from samples provided by research participants.</p> <p>FY21 Accomplishments:</p> <ol style="list-style-type: none"> 1. Started data collection of next wave (wave 3) of follow-up data from the STARRS-LS cohort of more than 14,500 Soldiers, including those who have left the Army and transitioned to civilian life. 2. Published six articles in peer-reviewed scientific journals 3. Conducted state-of-the art analyses, including machine-learning predictive models for several outcomes including suicidal behavior of the Army STARRS and STARRS-LS data and produced actionable findings for the Army and DoD <p>FY 2022 Plans: FY 2022 plans continue efforts as outlined in FY 2021.</p>	7.140	7.283	7.428	0.000	7.428

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Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / <i>Medical Technology Development</i>	Project (Number/Name) 508 / <i>Psychological Health and Resilience (USUHS)</i>

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
In addition to the primary achievement of research objectives, the program educates Federal employees as a benefit to the public they serve through Federal service, through support to civil authorities, and in non-Federal professional and academic collaborations.					
<i>FY 2023 Base Plans:</i> Continue efforts as outlined in FY 2021 and FY 2022.					
<i>FY 2023 OOC Plans:</i> N/A					
<i>FY 2022 to FY 2023 Increase/Decrease Statement:</i> Price adjustment for inflation.					
Accomplishments/Planned Programs Subtotals	7.140	7.283	7.428	0.000	7.428

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency										Date: March 2022		
Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0603115DHA / Medical Technology Development				Project (Number/Name) 509 / Innovative Technologies for Improved Medical Diagnoses, Rehabilitation and Warfighter Readiness (USUHS)			
COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
509: Innovative Technologies for Improved Medical Diagnoses, Rehabilitation and Warfighter Readiness (USUHS)	19.323	13.712	14.104	14.505	0.000	14.505	14.916	15.334	15.641	15.954	Continuing	Continuing

A. Mission Description and Budget Item Justification

The “Innovative Technologies for Improved Medical Diagnoses, Rehabilitation and Warfighter Readiness” program at USUHS is designed to answer fundamental questions of importance to the military medical mission of the Department of Defense in the three portfolio areas: Transforming Technology for the Warfighter (TTW), Surgical Critical Care, and the Rehabilitation Sciences Research.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Innovative Technologies for Improved Medical Diagnoses, Rehabilitation and Warfighter Readiness	13.712	14.104	14.505	0.000	14.505
Description: The TTW program aims to support highly collaborative advanced technology projects by bringing together industry, academia and civilian medical centers including minority serving institutions with experience in solving defense and civilian health problems. Supported projects will focus on the 3 principal medical areas for defense health (Combat Casualty Care, Military Operational Medicine, and Clinical and Rehabilitative Medicine) with an emphasis on direct relevance to identified military needs, translational potential and clear strategy for product commercialization with a low to medium risk – high reward payoff. Additionally, for USUHS, the TTW program will cultivate, establish and leverage partnerships between USUHS faculty/investigators and industry, academia and civilian medical centers including minority serving institutions. Results from the TTW program will increase DoD’s workforce capability, DoD’s access to leading edge technologies and leverage industry knowledge and funded research data for warfighter medical needs.					
Surgical Critical Care (SC2i) will enroll critically ill patients, leveraging deep medical and –omics data to develop Clinical Decision Support Tools (CDSTs) that will improve clinical outcomes and lower resource utilization across military and civilian healthcare systems. The CDSTs will further assist readiness by either accelerating return to duty (abridged length-of-stay across the ICU, general ward, and rehabilitation continuum of care) and curbing medical resource burdens.					
Rehabilitation Sciences Research supports clinical and translational research efforts dedicated to enhancing the rehabilitative care of the wounded warrior, particularly those with orthopedic trauma, amputation and					

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B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
<p>neurological injury. Research focus areas include: 1) Identifying and mitigating barriers to successful rehabilitation, return to duty and community reintegration; 2) Improved pain management to support active participation in rehabilitation; 3) Applying Advanced Technologies to augment rehabilitation methods and outcomes assessments; 4) Developing and testing advanced technologies to restore individual functional independence; 5) Regenerative Rehabilitation translational products for war-related trauma.</p> <p>Musculoskeletal injuries (MSI) are the largest source of disability in the military and affect 800,000 Service Members annually, accounting for 25 million days of limited duty. Most concerning, the disability discharge rate for MSI has increased 13x between 1981 and 2005 (70 vs. 950 per 100,000 persons), and these trends have continued to increase in the Department of Defense (DoD) and Veterans Affairs Administration in the most recent decade. The Defense Health Agency recognized this unmet clinical/operational gap and funded the formation of the Musculoskeletal Injury Rehabilitation Research for Operational Readiness (MIRROR) organization in 2019. In the past two years since our inception, MIRROR has established a world-class infrastructure (data, regulatory, governance) that is compliant with the DoD for conducting research, expanded the number of studies from 14 to 37, formed partnerships with 24 military and academic centers, received \$55 million in grant funding (with 10 applications pending for approximately \$5 million), hosted 5 educational symposiums, generated 18 Post-Operative Rehabilitation Protocols to standardized care across the Tri-Service, and published 26 abstracts and 17 peer-reviewed publications. Furthermore, in order to ensure the safety/health of our Service Members and research subjects, we donated COVID-19 antibody kits which allowed us to achieve enrollment over 2100 subjects. Moving forward, we plan to execute on our current projects and continue to provide value through: (1) new research and operational support to new military treatment facilities, (2) close critical care injury/pain gaps (e.g., spine, knee, ankle, shoulder), evaluate novel imaging modalities (e.g., elastography), performing sub analyses to understand gender disparities, predisposition to injury, response to treatments, etc. MIRROR was also selected to host a 3-hour session at MHSRS since we received 5% of the abstracts, but this event was unfortunately canceled.</p> <p>The Photomedicine to Enhance Military Readiness program is a four-year, \$22 million initiative with the Wellman Institute, DJO, Geneva Foundation, HJF, and Spaulding Rehabilitation. These teams are executing 9 clinical and translational research projects to deliver optimal dosimetry of photobiological therapy to enhance performance, reduce the potential for musculoskeletal injury, assist with nerve graft healing, enhance audiology function, etc. Projects are progressing and in various stages of device development, benchtop research, and regulatory review (Institutional Review Board (IRB) approval for clinical trials and Institutional Care and Use Committee</p>					

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B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
<p>(IACUC) approval for animal research). The team had 3 abstracts accepted to MHSRS and we continue to work on peripheral nerve repair and 3D collagen printing as a natural biomaterial.</p> <p>In addition these clinical and translational research projects, CRSR continues to provide leadership and coordination of the Military Treatment Facility Engagement Committee (MTFEC) within the Pain Management Collaboratory (PMC) Coordinating Center (PMC3), which is an \$81 million inter-agency initiative to support a multi-component research effort focused on non-pharmacological approaches for pain management. Four ongoing pragmatic trials studying non-pharmacological approaches to pain for military service members and veterans have accomplished their stated milestones and in the process have provided feedback to DHA on improved policies and procedures to enhance clinical research execution within the DoD.</p> <p>CRSR has been a leader in the 30 institution NCAA-DoD Concussion Assessment, Research and Education (CARE) Consortium, which includes the Service Academy Longitudinal Outcomes Study (SALTOS). To date recruitment totals over 52,000 participants, including more than 22,000 Service Academy cadets and midshipmen, with just under 9,000 recorded concussions making this the largest study of its kind on the natural history and neurobiology of concussion. In FY21, the CARE Consortium has published 18 peer-reviewed manuscripts, with 17 additional manuscripts currently in review, and completed 12 virtual presentations to disseminate important findings from this cohort. Additional funding has been secured totaling \$42.65 million for the longitudinal continuation study, CARE-SALTOS Integrated, which will follow cadets, midshipmen, and NCAA athletes post-graduation to determine intermediate and long-term impacts of concussion on health and military service.</p> <p>CRSR continued to maintain its efforts throughout the COVID-19 pandemic while keeping its subjects and research staff safe. Significant accomplishments during this time are (1) development of a mitigation return to research checklist. This check list, shared locally and nationally, is also followed at all U.S. Service Academies and WRNMMC. (2) Published the "COVID-19 Patient and Caregiver Rehabilitation Recovery Guide", and distributed to not only families and military units downrange in English and Spanish but internationally to share with their family and friends suffering from the pandemic to allow them to stay mission focused; (3) developed the WRNMMC post-discharge COVID-19 patient registry, telehealth, multidisciplinary holistic intervention; (4) created the COVID-19 survivor peer support group. Notable other accomplishments include: (1) continuation of work through Joint Incentive Funding (\$5.4M) between the DoD (USUHS) and VA (Miami) to miniaturize, optimize and clinically disseminate a wearable sensor augmented tele-rehabilitation tool for service members and veterans with lower limb amputation; (2) a successful large animal model for heterotopic ossification research;(3) Shailly Jariwala, Ph.D. was recognized as one of the internationally selected "Rising Stars of Regenerative Rehabilitation"; (4) two blue light emitting prototypes were developed to be used for mitigating infection after</p>					

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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
<p>osseointegration of prosthetic limbs; (5) preliminary data suggests that Service Dog Training to augment the rehabilitation of individuals with physical and behavioral health injuries is associated with reduced suicide; (6) MIRROR published new clinical practice guidelines for the DoD, with triservice concurrence to standardize and optimize post-operative rehabilitation interventions following the top 11 orthopaedic musculoskeletal surgeries performed in the DHA. (7) Dr. Paul Pasquina, CRSR Director, was announced as the 2020 recipient of the AMSUS Lifetime Achievement Award.</p> <p>FY 2022 Plans: FY 2022 plans continue efforts as outlined in FY 2021.</p> <p>FY 2023 Base Plans: Continue efforts as outlined in FY 2021</p> <p>FY 2023 OOC Plans: N/A</p> <p>FY 2022 to FY 2023 Increase/Decrease Statement: Price adjustments for inflation.</p>					
Accomplishments/Planned Programs Subtotals	13.712	14.104	14.505	0.000	14.505

C. Other Program Funding Summary (\$ in Millions)
N/A

Remarks

D. Acquisition Strategy
USUHS optimizes these research funds to achieve its research objectives, often in partnership and collaboration with funding received from other DoD and interagency sources through Interagency Agreements and inter-service Support Agreements, which may be executed via Federal assistance agreements or contracts.

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency										Date: March 2022		
Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0603115DHA / Medical Technology Development				Project (Number/Name) 511 / Cancer Moonshot Initiatives			
COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
511: Cancer Moonshot Initiatives	0.000	0.000	0.000	12.300	0.000	12.300	12.500	12.800	13.100	13.400	Continuing	Continuing

A. Mission Description and Budget Item Justification

DoD Cancer Moonshot 2 (CM2) is a mission assigned by the DoD to USU's Murtha Cancer Center Research Program (MCCRP) as a mandate from the White House's federal cancer moonshot part 2 that was initiated in 2022. CM2 is the next generation of the original federal cancer moonshot program initiated in 2016, for which the MCCRP is actively engaged in ongoing cancer studies. The DoD CM2 program will build on DoD's original Moonshot areas of study by enhancing the MCCRP's current initiatives and further utilizing and leveraging DoD's unique and additional capabilities to contribute to advancement of the cancer prevention, diagnosis and treatment goals of CM2. The MCCRP's three new initiatives under the CM2 for DoD include: 1) Cancer Research and Clinical Trial Network; 2) Epidemiology; and 3) DoD Serum Repository Projects.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Cancer Moonshot Initiatives	0.000	0.000	12.300	0.000	12.300
<p>Description: There are three new research areas developed for this new Project under the Cancer Moonshot 2 (CM2) for DoD through USU's MCCRP: 1) Cancer Research and Clinical Trial Network; 2) Epidemiology; and 3) DoD Serum Repository Projects. These three new initiatives will address the federal government / White House's seven stated goals for Cancer Moonshot 2 which are: to diagnose cancer sooner; to prevent cancer; to address inequities; to target the right treatments to the right patients; to speed progress against the most deadly and rare cancers including childhood cancers; to support patients caregivers and survivors; and to learn from all patients. Under these seven new pillars for CM2, the two overall goals per the White House for Cancer Moonshot 2 is to decrease the cancer death rate from cancer by 50% over the next 25 years, and to improve the experience of people and their families living with and surviving cancer. Our DoD Cancer Moonshot 2 initiatives are specifically developed and precisely aligned to address the overall CM2 seven pillars and two goals within the DoD health care system along with our federal partners. MCCRP focus of these projects is for active duty, veterans, and beneficiaries at risk for or with cancer. However, the initiatives and findings will have impact for the nation as a whole as a part of the larger national Cancer Moonshot 2.</p> <p>FY 2022 Plans: No funding for FY22 so N/A</p> <p>FY 2023 Base Plans:</p>					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / <i>Medical Technology Development</i>	Project (Number/Name) 511 / <i>Cancer Moonshot Initiatives</i>

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
<p>There are three new projects under the Cancer Moonshot 2 (CM2) for DoD through USU's MCCRCP: 1) Cancer Research and Clinical Trial Network; 2) Epidemiology; and 3) DoD Serum Repository Projects. The base plans for each of the three are as follows:</p> <p>1) Cancer Research and Clinical Trial Network: Herein referred to as "the network", this is the foundational element of CM2 as it provides the link between the research protocols, studies, and clinical trials, and the patients who need equitable access to them. It is axiomatic that the best treatment for cancer patients is a clinical trial. Despite knowing that, less than 10% of all cancer patients are enrolled in a clinical trial and there are known inequities with regards to lack of diversity in clinical trial enrollment. While MCCRCP has done some limited engagement in this area across the DoD and other federal hospitals for our active duty, veterans, and beneficiaries with cancer, this Task #1 will enable the full build-out, development, and to actualize the vast potential of the DoD health care system and its hospitals as well as partner federal facilities. MCCRCP will fully enable, staff, and support the network at our hospitals with appropriate needed resources of all types (e.g., personnel; materiel; protocols including regulatory support; data and sample acquisition and management; analytic functions of all acquired data to create new knowledge and material products to include DoD clinical practice guideline development, recommendations to the DHA Oncology Clinical Community to change evidence-based cancer practices across the network, etc. Funding will be also used to support new and varied research studies and clinical trials well beyond those presently underway. These new network clinical trials will include but not be limited to NCI (National Cancer Institute) trials both intramural (NCI investigator specific trials that hitherto are only available at the Bethesda location but under this initiative we would provide equitable access by DoD cancer patients to these unique and new studies), and extramural (e.g., through the trials of cooperative groups known as Alliance, SWOG, COG (Children's Oncology Group), GOG (GYN Oncology Group, etc). Additionally, MCCRCP-specific and developed clinical trials and research studies that are unique to our DoD would be newly developed and/or newly expanded and fully implemented through this new network initiative.</p> <p>2) Epidemiology: Herein referred to as MCCRCP "Epi", this area will develop new and expanded aspects and components of the cancer epidemiology research paradigm of MCCRCP. Development of a full, robust, and multi-dimensional cancer epidemiology program for CM2 will result in fullest alignment with the goals and intent of the seven pillars of CM2 and the overall goals of decreasing cancer deaths within the DoD and our patients including active duty (Readiness preservation), veterans, and beneficiaries. To accomplish all of this, MCCRCP Epi will have new and expanded missions, capabilities, personnel, database access and computing (data science) capabilities including but not limited to cloud computing support for storage and analytics, for any and all MCCRCP CM2 projects as well as intramural cancer research projects. New Epi research will be designed, implemented, and conducted that has DoD-wide implications for improving patient care and outcomes (cancer survival) including but not limited to a RWE (Real World Evidence) data analysis program; a CPG (Clinical</p>					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / <i>Medical Technology Development</i>	Project (Number/Name) 511 / <i>Cancer Moonshot Initiatives</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
	<p>Practice Guideline) development program that is focused on the presently untapped use of the vast DoD and TRICARE databases of all types in order to develop new, DoD-specific and DoD-focused cancer practice guidelines that will then be promulgated through the DoD/DHA Oncology Clinical Community (OCC) and across our Network that will have direct and ongoing positive impacts on cancer patients as well as ensuring equity of care experience and outcomes for all DoD patients. All new Epi related research, programs, capabilities and associated needed support will be part of this part of CM2.</p> <p>3) DoD Serum Repository Projects: Herein referred to the “DoDSR”, this new task will be focused on and responsible for the new, compelling interest in using the world-class DoDSR which contains over 62 million blood serum specimens drawn longitudinally on all active duty service members since the late 1980’s to specifically study and address the questions surrounding the role of various DoD-specific environmental exposures and militarily-relevant cancer and other health risks based on the servicemembers’ MOS (Military Occupational Specialty), deployment history, exposure to unknown and/or uncharacterized risks (e.g., Burn pits; high frequency electromagnetic radiation; environmental and/or workplace toxins to include but not limited to high hydrocarbon fuels, soil toxins; others. New research studies and novel methods will be developed, devised, and used to study thousands of DoDSR specimens from active duty servicemembers with a variety of cancer and health risk factors, and to study the ability of new laboratory technologies and capabilities (e.g., microRNA, DNA methylation, single cell analysis, others, multiple protein and/or amino acid panel analytics, others) to identify new tests for the identification and amelioration of risks to service members and veterans from said exposures. Additionally, this task will fund the development of new research protocols, molecular technologies, and data analytic processes and platforms within the focused area of maximizing the promise of the DoDSR to answer critical research questions surrounding these DoD-specific problems affecting the readiness of the force through their impact on service members.</p> <p>FY 2023 OOC Plans: No funding for this column so N/A</p> <p>FY 2022 to FY 2023 Increase/Decrease Statement: This Project overall is a new start in FY 2023 and all elements of this new Project are new and novel in support of the DoD aspect of the federal Cancer Moonshot 2 initiative mandated by the White House in February 2022.</p>				
Accomplishments/Planned Programs Subtotals	0.000	0.000	12.300	0.000	12.300
	FY 2021	FY 2022			
Congressional Add: Cancer Moonshot Initiatives (USUHS)	0.000	0.000			

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / <i>Medical Technology Development</i>	Project (Number/Name) 511 / <i>Cancer Moonshot Initiatives</i>
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	FY 2021	FY 2022
<i>FY 2021 Accomplishments:</i> N/A		
<i>FY 2022 Plans:</i> N/A		
Congressional Adds Subtotals	0.000	0.000

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

D. Acquisition Strategy

USUHS optimizes these research funds to achieve its research objectives, often in partnership and collaboration with funding received from other DoD and interagency sources through Interagency Agreements and inter-service Support Agreements, which may be executed via Federal assistance agreements or contracts.

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / Medical Technology Development	Project (Number/Name) 830A / Deployed Warfighter Protection (Army)
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
830A: <i>Deployed Warfighter Protection (Army)</i>	46.164	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

A. Mission Description and Budget Item Justification

For the Armed Forces Pest Management Board (AFPMB), the Deployed Warfighter Protection project plans to develop new or improved protection for ground forces from disease-carrying insects. The focus of this program is to develop new or improved systems for controlling insects that transmit malaria, dengue, chikungunya and other emerging infectious diseases under austere, remote, and combat conditions; understand the physiology of insecticidal activity to develop new compounds with greater specific activity and/or higher user acceptability; examine existing area repellents for efficacy and develop new spatially effective repellent systems useful in military situations; develop new methods or formulations for treating cloth to prevent vector biting; and expand the number of active ingredients and formulations of public health pest pesticides, products and application technologies available for safe, and effective applications. The AFPMB partners with the President’s Malaria Initiative and the World Health Organization Global Malaria Program to lead development of new tools for insect-borne disease prevention.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Deployed Warfighter Protection	0.000	-	-	-	-
Description: The Deployed Warfighter Protection project will develop new or improved protection for ground forces from disease-carrying insects.					
Accomplishments/Planned Programs Subtotals	0.000	-	-	-	-

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

D. Acquisition Strategy

Develop, mature and field new or improved products and strategies that protect U.S. forces from disease-carrying insects. Identify acquisition-based research and development requirements in a Capability Needs Assessment. Refine target product profiles and performance criteria. Secure registered trademarks, patents, commercial partners, and/or EPA registration of new or improved insecticides, application technologies and repellent systems. Continue to partner with industry to field products and coordinate with the Services, AFPMB, USAMMDA, DLA and relevant Program Executive Offices to transition efforts.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130: <i>Defense Health Program I BA 2: RDT&E</i>	R-1 Program Element (Number/Name) PE 0604110DHA I <i>Medical Products Support and Advanced Concept Development</i>
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
Total Program Element	745.966	149.831	197.360	166.960	0.000	166.960	172.289	175.432	179.073	182.384	Continuing	Continuing
400Z: <i>CSI - Congressional Special Interests</i>	401.343	5.000	49.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
374: <i>GDF - Medical Products Support and Advanced Concept Development</i>	332.623	131.517	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
374A: <i>GDF - Medical Simulation and Training</i>	0.000	0.000	18.490	18.440	0.000	18.440	17.470	16.460	17.020	17.360	Continuing	Continuing
374B: <i>GDF - Medical Readiness</i>	0.000	0.000	48.816	69.157	0.000	69.157	83.101	74.568	77.893	79.452	Continuing	Continuing
374C: <i>GDF - Medical Combat Support</i>	0.000	0.000	49.661	27.177	0.000	27.177	18.372	22.919	18.078	18.418	Continuing	Continuing
374D: <i>GDF - Restoration & Healthcare Systems</i>	0.000	0.000	26.731	26.078	0.000	26.078	24.726	32.595	36.502	37.232	Continuing	Continuing
374E: <i>GDF - Medical Materiel/ Medical Biological Defense Equipment Development</i>	0.000	0.000	0.000	21.863	0.000	21.863	24.289	24.473	25.075	25.327	Continuing	Continuing
434A: <i>Air & Space Medical Readiness Advanced Concept Development (AF)</i>	12.000	4.080	4.162	4.245	0.000	4.245	4.331	4.417	4.505	4.595	Continuing	Continuing
441: <i>CSI- Joint Warfighter Medical Research</i>	0.000	9.234	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

A. Mission Description and Budget Item Justification

Guidance for Development of the Force - Medical Products Support and Advanced Concept Development: This program element (PE) provides funding to support: advanced concept development of medical products that are regulated by the US Food and Drug Administration (FDA); clinical and field validation studies supporting the transition of FDA-licensed and unregulated products and medical practice guidelines to the military operational user; prototyping; risk reduction and product transition efforts for medical information technology applications such as coordination with the Program Execution Offices for integration of medical aspects into other acquisition Programs of Record; and medical simulation and training system technologies.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130: <i>Defense Health Program I BA 2: RDT&E</i>	R-1 Program Element (Number/Name) PE 0604110DHA I <i>Medical Products Support and Advanced Concept Development</i>
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Development, test, and evaluation in this PE is designed to address requirements identified through the Joint Capabilities Integration and Development System and other Department of Defense operational needs. Medical development, test, and evaluation priorities for the Defense Health Program (DHP) are guided by, and will support, the National Defense Strategy, the Joint Staff Surgeon's Joint Concept for Health Services, and other overarching DoD strategic framework documents.

Program development and execution is coordinated with all of the Military Services and Special Operations Command, appropriate Defense agencies or activities and other federal agencies, to include the Department of Veterans Affairs, the Department of Health and Human Services, and the Department of Homeland Security. Coordination occurs through the planning and execution activities of the Defense Health Agency Component Acquisition Executive (DHA CAE) as the Milestone Decision Authority for medical materiel development efforts. As technologies mature, the most promising efforts will transition to medical products and support systems development funding, PE 0605145.

B. Program Change Summary (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Previous President's Budget	149.831	142.252	166.960	0.000	166.960
Current President's Budget	149.831	197.360	166.960	0.000	166.960
Total Adjustments	0.000	55.108	0.000	0.000	0.000
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	55.108			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			

Congressional Add Details (\$ in Millions, and Includes General Reductions)

Project: 400Z: CSI - Congressional Special Interests

Congressional Add: 441A - *Joint Warfighter Medical Research Program*

Congressional Add: 464 - *GDF - Restore Core Research Funding Reduction*

Congressional Add: 464 - *USUHS - Restore Core Research Funding Reduction for National Disaster Medical System Pilot Study*

Congressional Add: 400Z - *Congressional Add - Joint civilian-medical surge facility*

Congressional Add Subtotals for Project: 400Z

Project: 374E: GDF - Medical Materiel/Medical Biological Defense Equipment Development

Congressional Add: *GDF MPSACD Medical Materiel/Medical Biological Defense Equipment Development*

Congressional Add Subtotals for Project: 374E

	FY 2021	FY 2022
	5.000	16.000
	-	4.500
	-	15.000
	-	14.000
Congressional Add Subtotals for Project: 400Z	5.000	49.500
	0.000	0.000
Congressional Add Subtotals for Project: 374E	0.000	0.000

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Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Defense Health Agency	Date: March 2022
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Appropriation/Budget Activity 0130: <i>Defense Health Program I BA 2: RDT&E</i>	R-1 Program Element (Number/Name) PE 0604110DHA / <i>Medical Products Support and Advanced Concept Development</i>
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Congressional Add Details (\$ in Millions, and Includes General Reductions)

	FY 2021	FY 2022
Congressional Add Totals for all Projects	5.000	49.500

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0604110DHA / Medical Products Support and Advanced Concept Development	Project (Number/Name) 400Z / CSI - Congressional Special Interests
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COST (\$ in Millions)	Prior Years ⁽⁺⁾	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
400Z: CSI - Congressional Special Interests	401.343	5.000	49.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

⁽⁺⁾ The sum of all Prior Years is \$634.657 million less than the represented total due to several projects ending

A. Mission Description and Budget Item Justification

Defense Health Program funded Congressional Special Interest (CSI) directed research. The strategy for the FY 2022 Congressionally-directed research program is to stimulate innovative research through a competitive, focused, peer-reviewed medical research at intramural and extramural research sites. Because of the CSI annual structure, out-year funding is not programmed.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022
Congressional Add: 441A - Joint Warfighter Medical Research Program	5.000	16.000
FY 2021 Accomplishments: CSI Add		
FY 2022 Plans: CSI Add		
Congressional Add: 464 - GDF - Restore Core Research Funding Reduction	-	4.500
FY 2022 Plans: This is a program increase due to GDF restoral in the FY22 enacted budget.		
Congressional Add: 464 - USUHS - Restore Core Research Funding Reduction for National Disaster Medical System Pilot Study	-	15.000
FY 2022 Plans: This is a program increase due to restoral in the FY22 enacted budget.		
Congressional Add: 400Z - Congressional Add - Joint civilian-medical surge facility	-	14.000
FY 2022 Plans: FY22 Congressional Add		
Congressional Adds Subtotals	5.000	49.500

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0604110DHA / <i>Medical Products Support and Advanced Concept Development</i>	Project (Number/Name) 400Z / <i>CSI - Congressional Special Interests</i>

D. Acquisition Strategy

Prior year CSI funded research will be assessed for developmental maturity and qualification for initial or continued advanced development funding. If advanced development criteria are met, follow-on development will be solicited through a peer-reviewed process.

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency										Date: March 2022		
Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0604110DHA / Medical Products Support and Advanced Concept Development				Project (Number/Name) 374 / GDF - Medical Products Support and Advanced Concept Development			
COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
374: GDF - Medical Products Support and Advanced Concept Development	332.623	131.517	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

Note

Starting in FY 2022, funding from Project 374 was realigned to Projects 374A, 374B, 374C, and 374D.

A. Mission Description and Budget Item Justification

Guidance for Development of the Force-Medical Products Support and Advanced Concept Development: This funding supports materiel development of products that provide solutions for the most pressing medical needs of the Warfighter through advanced concept development of medical products that are regulated by the US Food and Drug Administration (FDA); clinical and field validation studies supporting the transition of FDA-licensed and unregulated products and medical practice guidelines to the military operational user; prototyping; risk reduction and product transition efforts for medical information technology applications such as coordination with the Program Execution Offices for integration of medical aspects into other acquisition Programs of Record; and medical simulation and training system technologies.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: GDF – Medical Product Support and Advanced Concept Development	131.517	0.000	0.000	0.000	0.000
Description: This funding provides product support and advanced concept development of materiel products that meet the medical needs of the warfighter. Materiel development may include accelerated transition of US Food and Drug Administration (FDA)-licensed and unregulated products and medical practice guidelines to the military operational user through clinical and field validation studies, prototyping, risk reduction, and product transition efforts for medical information technology applications and medical training systems technologies.					
FY 2022 Plans: Starting in FY 2022, funding from Project 374 was realigned to Projects 374A, 374B, 374C, and 374D.					
FY 2023 Base Plans: Starting in FY 2022, funding from Project 374 was realigned to Projects 374A, 374B, 374C, and 374D.					
FY 2023 OOC Plans: N/A					
FY 2022 to FY 2023 Increase/Decrease Statement:					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency	Date: March 2022
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Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0604110DHA / <i>Medical Products Support and Advanced Concept Development</i>	Project (Number/Name) 374 / <i>GDF - Medical Products Support and Advanced Concept Development</i>
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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Starting in FY 2022, funding from Project 374 was realigned to Projects 374A, 374B, 374C, and 374D.					
Accomplishments/Planned Programs Subtotals	131.517	0.000	0.000	0.000	0.000

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

D. Acquisition Strategy

This program will test and evaluate pharmaceuticals, devices, medical support systems, and medical information technologies in government-managed clinical trials and user assessments to gather data required for military and regulatory requirements prior to production and fielding, to include FDA approval, Environmental Protection Agency registration, and safe-to-fly evaluation.

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0604110DHA / Medical Products Support and Advanced Concept Development	Project (Number/Name) 374A / GDF - Medical Simulation and Training
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
374A: GDF - Medical Simulation and Training	0.000	0.000	18.490	18.440	0.000	18.440	17.470	16.460	17.020	17.360	Continuing	Continuing

Note

Starting in FY 2022, funding for Project 374A was realigned from Projects 374. This Project is not a new start.

A. Mission Description and Budget Item Justification

Guidance for Development of the Force - Medical Simulation and Training: This funding supports materiel development of products that provide solutions for the most pressing simulation and training needs of the Warfighter through advanced concept development and prototyping of medical products and medical information technology applications in direct support of MHS Beneficiaries.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: GDF - Medical Simulation and Training	0.000	18.490	18.440	0.000	18.440
<p>Description: This funding provides product support and advanced concept development of materiel products that meet the medical simulation and training needs of the warfighter. Materiel development may include accelerated transition of simulation and training capabilities along with medical practice guidelines to the military operational user through clinical and field validation studies, prototyping, risk reduction, and product transition efforts for medical information technology applications and medical training systems technologies.</p> <p>FY 2022 Plans: Programs will focus on development and application of medical simulation and training capabilities for hospital care and operations. The Point-of-Injury and Trauma Simulation program will continue capability development tying together individual, collective, service and Joint training to Warfighters and Medical Professionals across the Department of Defense. The Virtual Education Center advances and addresses patient education shortfalls to increase patient experiences and knowledge. The Hospital Training Simulation Systems and Evacuation and Transportation Simulation Systems programs will continue to develop, standardize and baseline the Medical Treatment Facility, Theater Hospital training (care and procedures), and en-route patient care training for interoperability. The Learning, Tactics and Technology Systems program will continue to develop the training courses, hands-on training, and exercises to develop and maintain military medical skills that enhance and</p>					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0604110DHA / <i>Medical Products Support and Advanced Concept Development</i>	Project (Number/Name) 374A / <i>GDF - Medical Simulation and Training</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
<p>maximize the training simulations, manikins, and will unify patient and clinical education across the MHS and improving healthcare across the Department of Defense.</p> <p>FY 2023 Base Plans: FY 2023 plans continue efforts as outlined in FY 2022 and support advanced development, prototypes and evaluation of medical simulation and training.</p> <p>FY 2023 OOC Plans: N/A</p> <p>FY 2022 to FY 2023 Increase/Decrease Statement: Funding increase due to inflation.</p>					
Accomplishments/Planned Programs Subtotals	0.000	18.490	18.440	0.000	18.440

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

D. Acquisition Strategy

This program will test and evaluate medical support systems, medical information technologies, and simulation and training capabilities in operational and clinical user assessments to gather data required for military and regulatory requirements prior to production and fielding.

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency										Date: March 2022		
Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0604110DHA / Medical Products Support and Advanced Concept Development				Project (Number/Name) 374B / GDF - Medical Readiness			
COST (\$ in Millions)	Prior Years (+)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
374B: GDF - Medical Readiness	0.000	0.000	48.816	69.157	0.000	69.157	83.101	74.568	77.893	79.452	Continuing	Continuing

(+) The sum of all Prior Years is \$0.000 million less than the represented total due to several projects ending

Note

Starting in FY 2022, funding for Project 374B was realigned from Projects 374. This Project is not a new start.

A. Mission Description and Budget Item Justification

Guidance for Development of the Force-Medical Products Support and Advanced Concept Development: This funding supports materiel development of products that provide solutions for the most pressing medical needs of the Warfighter through advanced concept development of medical products that are regulated by the US Food and Drug Administration (FDA); clinical and field validation studies supporting the transition of FDA-licensed and unregulated products and medical practice guidelines to the military operational user; prototyping; risk reduction and product transition efforts for medical information technology applications such as coordination with the Program Execution Offices for integration of medical aspects into other acquisition Programs of Record.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: GDF - Medical Readiness	0.000	48.816	69.157	0.000	69.157
Description: This funding provides product support and advanced concept development of materiel products that meet the medical needs of the warfighter. Materiel development may include accelerated transition of US Food and Drug Administration (FDA)-licensed and unregulated products and medical practice guidelines to the military operational user through clinical and field validation studies, prototyping, risk reduction, and product transition efforts for medical information technology applications.					
FY 2022 Plans: Programs will focus on prevention of illness and injury along with optimization of human performance. Significant FY22 Programs: the interoperable Medical Automated Systems (iMAS) program plans to develop a Proof of Concept demonstration; the Broad Spectrum Snake Bite Antidote (BSSA) program plans to initiate the Phase 2 clinical trials; the Enterotoxigenic E. coli Vaccine program will initiate Phase 3 clinical trials; the Pharmaceutical Intervention for Noise-Induced Hearing Loss-Acute Exposure Treatment (PINIHL-AET) program plans to work towards Institutional Review Board (IRB) and Human Research Protection Official (HRPO) approvals; and the Health Readiness and Performance System (HRAPS) program plans to begin User Testing and Operational Assessment of its platform. Also, efforts will continue for the following programs: Concussion Dosimetry; Hyperbaric Neurocognitive Assessment System (HNAS); Breath Test for Pulmonary Oxygen Toxicity; Additive					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0604110DHA / <i>Medical Products Support and Advanced Concept Development</i>	Project (Number/Name) 374B / <i>GDF - Medical Readiness</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Manufacturing Working Group; and Next Generation Environmental Health Risk Management Capabilities program FY 2023 Base Plans: FY 2023 plans continue efforts as outlined in FY 2022 and support advanced development, prototypes and evaluation of medical readiness capabilities. FY 2023 OOC Plans: N/A FY 2022 to FY 2023 Increase/Decrease Statement: Increase due to strategic realignments within PE from Medical Combat Support.					
Accomplishments/Planned Programs Subtotals	0.000	48.816	69.157	0.000	69.157

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

D. Acquisition Strategy

This program will test and evaluate pharmaceuticals, devices, medical support systems, and medical information technologies in government-managed clinical trials and user assessments to gather data required for military and regulatory requirements prior to production and fielding, to include FDA approval, Environmental Protection Agency registration, and safe-to-fly evaluation.

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0604110DHA / Medical Products Support and Advanced Concept Development	Project (Number/Name) 374C / GDF - Medical Combat Support
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
374C: GDF - Medical Combat Support	0.000	0.000	49.661	27.177	0.000	27.177	18.372	22.919	18.078	18.418	Continuing	Continuing

Note
Starting in FY 2022, funding for Project 374C was realigned from Projects 374. This Project is not a new start.

A. Mission Description and Budget Item Justification

Guidance for Development of the Force-Medical Products Support and Advanced Concept Development: This funding supports materiel development of products that provide solutions for the most pressing medical needs of the Warfighter through advanced concept development of medical products that are regulated by the US Food and Drug Administration (FDA); clinical and field validation studies supporting the transition of FDA-licensed and unregulated products and medical practice guidelines to the military operational user; prototyping; risk reduction and product transition efforts for medical information technology applications such as coordination with the Program Execution Offices for integration of medical aspects into other acquisition Programs of Record.

B. Accomplishments/Planned Programs (\$ in Millions)

Title: GDF - Medical Combat Support

Description: This funding provides product support and advanced concept development of materiel products that meet the medical needs of the warfighter. Materiel development may include accelerated transition of US Food and Drug Administration (FDA)-licensed and unregulated products and medical practice guidelines to the military operational user through clinical and field validation studies, prototyping, risk reduction, and product transition efforts for medical information technology applications.

FY 2022 Plans:

Programs will focus on operational support. Significant FY22 Programs: Battlefield Pain Management – Ketamine plans to conduct clinical trials; Non-Compressible Hemorrhage Control (NHC) plans for a Milestone B decision for its polymeric foam product; Cold Stored Platelets (CSP) plans for a Milestone B decision and the initiation of a characterization study for In vitro CSP; Canine Blood Products program plans to complete a clinical trauma study; and the Joint Multi-Channel Infusion Pump program plans to achieve compliance with all Milestone B requirements. Also, efforts will continue for the following programs: Hemorrhage Detection (HD) (AMM Monitoring); Traumatic Brain Injury (TBI) Assessment & Diagnosis – Mobile Applications; Rapid Donor Screening; Combat Wound Treatment and Management; Digital Radiography; and Wound Healing Gauze.

FY 2023 Base Plans:

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: GDF - Medical Combat Support	0.000	49.661	27.177	0.000	27.177

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0604110DHA / <i>Medical Products Support and Advanced Concept Development</i>	Project (Number/Name) 374C / <i>GDF - Medical Combat Support</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
FY 2023 plans continue efforts as outlined in FY 2022 and support advanced development, prototypes and evaluation of medical combat support capabilities					
<i>FY 2023 OOC Plans:</i> N/A					
<i>FY 2022 to FY 2023 Increase/Decrease Statement:</i> Decrease due to strategic realignments within PE to Medical Readiness.					
Accomplishments/Planned Programs Subtotals	0.000	49.661	27.177	0.000	27.177

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

D. Acquisition Strategy

This program will test and evaluate pharmaceuticals, devices, medical support systems, and medical information technologies in government-managed clinical trials and user assessments to gather data required for military and regulatory requirements prior to production and fielding, to include FDA approval, Environmental Protection Agency registration, and safe-to-fly evaluation.

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0604110DHA / Medical Products Support and Advanced Concept Development	Project (Number/Name) 374D / GDF - Restoration & Healthcare Systems
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
374D: GDF - Restoration & Healthcare Systems	0.000	0.000	26.731	26.078	0.000	26.078	24.726	32.595	36.502	37.232	Continuing	Continuing

Note
Starting in FY 2022, funding for Project 374D was realigned from Projects 374. This Project is not a new start.

A. Mission Description and Budget Item Justification

Guidance for Development of the Force-Medical Products Support and Advanced Concept Development: This funding supports materiel development of products that provide solutions for the most pressing medical needs of the Warfighter through advanced concept development of medical products that are regulated by the US Food and Drug Administration (FDA); clinical and field validation studies supporting the transition of FDA-licensed and unregulated products and medical practice guidelines to the military operational user; prototyping; risk reduction and product transition efforts for medical information technology applications such as coordination with the Program Execution Offices for integration of medical aspects into other acquisition Programs of Record.

B. Accomplishments/Planned Programs (\$ in Millions)

Title: GDF - Restoration & Healthcare Systems

Description: This funding provides product support and advanced concept development of materiel products that meet the medical needs of the warfighter. Materiel development may include accelerated transition of US Food and Drug Administration (FDA)-licensed and unregulated products and medical practice guidelines to the military operational user through clinical and field validation studies, prototyping, risk reduction, and product transition efforts for medical information technology applications.

FY 2022 Plans:

Programs will focus on treatments to be used to restore form and function to warfighters as well as improve healthcare. Significant FY22 Programs: The Traumatic Brain Injury (TBI) - Drug Treatment program will begin moderate TBI Phase 2 adaptive trial enrollment testing for 3 generic drugs (FDA approved for other diseases) as candidates for TBI treatment; The Post Traumatic Stress Disorder (PTSD) - Drug Treatment program will continue the Adaptive Platform Trial (APT) and study to de-risk endpoint selection; and the Bacteriophage for Treatment of Bacterial Infections (BTBI) program plans to complete Phase 1b/2a clinical trials for precision phage mixture. Also, efforts continue for the Post Traumatic Stress Disorder (PTSD) Screening Tool program.

FY 2023 Base Plans:

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
	0.000	26.731	26.078	0.000	26.078

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0604110DHA / <i>Medical Products Support and Advanced Concept Development</i>	Project (Number/Name) 374D / <i>GDF - Restoration & Healthcare Systems</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
FY 2023 plans continue efforts as outlined in FY 2022 and support advanced development, prototypes and evaluation of medical restoration and healthcare system capabilities. FY 2023 OOC Plans: N/A FY 2022 to FY 2023 Increase/Decrease Statement: Increase due to inflation program growth.					
Accomplishments/Planned Programs Subtotals	0.000	26.731	26.078	0.000	26.078

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

D. Acquisition Strategy

This program will test and evaluate pharmaceuticals, devices, medical support systems, and medical information technologies in government-managed clinical trials and user assessments to gather data required for military and regulatory requirements prior to production and fielding, to include FDA approval, Environmental Protection Agency registration, and safe-to-fly evaluation.

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0604110DHA / Medical Products Support and Advanced Concept Development	Project (Number/Name) 374E / GDF - Medical Materiel/Medical Biological Defense Equipment Development
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
374E: GDF - Medical Materiel/Medical Biological Defense Equipment Development	0.000	0.000	0.000	21.863	0.000	21.863	24.289	24.473	25.075	25.327	Continuing	Continuing

A. Mission Description and Budget Item Justification

Funding and mission realignment of US Army Medical Research and Development Command transfer to the Defense Health Agency in order to meet Congressional intent as outlined in NDAA 2019 (Section 711) and NDAA 2020 (Section 737) in support of Medical Materiel/Medical Biological Defense Equipment Development.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: GDF MPSACD Medical Materiel/Medical Biological Defense Equipment Development	0.000	0.000	21.863	0.000	21.863
Description: Programmatic transfer in accordance with the 711/737 US Army Medical Research and Development Command transfer to Defense Health Agency in support of Medical Materiel/Medical Biological Defense Equipment Development from Army PE 0603807A.					
FY 2022 Plans: N/A					
FY 2023 Base Plans: Programs will focus on advanced component development, test and evaluation in support of Medical Materiel/Medical Biological Defense Equipment Development.					
FY 2023 OOC Plans: N/A					
FY 2022 to FY 2023 Increase/Decrease Statement: Funding increase for this Project was due to transfer/realignment from Army.					
Accomplishments/Planned Programs Subtotals	0.000	0.000	21.863	0.000	21.863
	FY 2021	FY 2022			
Congressional Add: GDF MPSACD Medical Materiel/Medical Biological Defense Equipment Development	0.000	0.000			

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022	
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0604110DHA / <i>Medical Products Support and Advanced Concept Development</i>	Project (Number/Name) 374E / <i>GDF - Medical Materiel/Medical Biological Defense Equipment Development</i>	
		FY 2021	FY 2022
<i>FY 2021 Accomplishments:</i> N/A			
<i>FY 2022 Plans:</i> N/A			
Congressional Adds Subtotals		0.000	0.000

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency										Date: March 2022		
Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0604110DHA / Medical Products Support and Advanced Concept Development				Project (Number/Name) 434A / Air & Space Medical Readiness Advanced Concept Development (AF)			
COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
434A: Air & Space Medical Readiness Advanced Concept Development (AF)	12.000	4.080	4.162	4.245	0.000	4.245	4.331	4.417	4.505	4.595	Continuing	Continuing

A. Mission Description and Budget Item Justification

This project focuses on coordinating the activities to rapidly field advanced medical capabilities to meet the needs of warfighters while bridging the gap between science and technology (S&T) and development, fielding, and sustainment. This project enables the fielding of advanced medical capabilities (Technology Readiness Level-TRL 5-7) to address the vital medical readiness needs of our Airmen. Development, modification, and modernization projects emphasize technologies supporting the Air Force (AF) Surgeon General’s aerospace & operational medicine and medical readiness priorities. This project ensures viability of S&T and translational research efforts with materiel components by providing programmed funding for logical progression and transition of those activities into the product development lifecycle and into the hands of AF end-users.

B. Accomplishments/Planned Programs (\$ in Millions)

Title: Air & Space Medical Readiness Advanced Concept Development (AF)

Description: This project ensures balance, rigor, and timely fielding of medical capabilities in the AF Advanced Development portfolio. This project focuses on the advancement of Engineering and Manufacturing Development (EMD) for prototypes and production representative units that address AF capability gaps in aerospace and operational medicine and medical readiness.

FY 2022 Plans:

Continue materiel developments of the: a) Trauma-Specific Vascular Shunt device for restoring blood flow to extremities post trauma during en route care; b) Biomeme Pathogen Surveillance System, a far-forward handheld diagnostics and detection capability for AF relevant pathogens; c) Spinal Injury Transport – Device (SIT-D), a man-portable immobilization device for use in the en route care system; and d) the Automated Vision Tester (AVT), a state-of-the art vision tester for measurable and meaningful specs for Airman vision standards. Begin assessment and development of medical materiel efforts including, but not limited to, autonomous closed-loop control of oxygen and ventilation intervention during en route patient care and on-demand sterile water for injection and Intravenous (IV) solutions in deployed Expeditionary Medical Support System (EMEDS). Transition to the AF Warfighter the following capabilities: Flashing Indicators of Swimmer’s Health (FISH) and the Patient Loading System (PLS).

FY 2023 Base Plans:

FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
4.080	4.162	4.245	0.000	4.245

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency	Date: March 2022
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Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0604110DHA / <i>Medical Products Support and Advanced Concept Development</i>	Project (Number/Name) 434A / <i>Air & Space Medical Readiness Advanced Concept Development (AF)</i>
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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
FY22 plans continue efforts as outlined in FY 2021.					
FY 2023 OOC Plans: N/A					
FY 2022 to FY 2023 Increase/Decrease Statement: Funding increase due to inflation.					
Accomplishments/Planned Programs Subtotals	4.080	4.162	4.245	0.000	4.245

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

Accomplishments: Made significant advancements towards the materiel development of the Patient Loading System (PLS) which has now transitioned to production. The PLS is an en route care ramp system for on- / off- boarding with high deck aircraft. Additionally, the Field Intravenous Expeditionary System yielded two prototypes that went early operational assessments prior to Phase III and is being postured for joint acquisition consideration. The Spinal Immobilization Transport Device; Phase III SBIR Mod for final development of four First Article production representative units to be delivered no later than December 2021 followed by Safe-to-Fly and Final Operational Test and Evaluation slated to begin January 2022. The final technical report is slated to be delivered NLT 30 Mar 2022 with a production contract award expected NLT June 2022.

D. Acquisition Strategy

Partnerships with Defense Health Agency/Component Acquisition Executive (DHA/CAE), the U.S. Army Medical Research & Development Command (USAMRMC), U.S. Army Medical Research Acquisition Activity (USAMRAA), Navy Medical Research Center (NMRC), Air Force Research Laboratory (AFRL), Air Force Life Cycle Management Center (AFLCMC), Department of the Interior (interagency cooperative agreements and use award of delivery orders and task assignments) and medical technology consortiums to perform engineering, manufacturing, and prototype development Indefinite Delivery, Indefinite Quality (IDIQ) vehicles to include those awarded under Small Business Innovation Research (SBIR) phase III provisions. Utilization of SBIR program direct awards for Phase III transition efforts and a Cooperative Agreement structure through foundations supporting military medical research and development programs. Will utilize industry-standard project management processes and DoD Acquisition process managed by the AFLCMC, Wright-Patterson AFB.

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0604110DHA / Medical Products Support and Advanced Concept Development	Project (Number/Name) 441 / CSI- Joint Warfighter Medical Research
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
441: CSI- Joint Warfighter Medical Research	0.000	9.234	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

A. Mission Description and Budget Item Justification
Congressional Add In

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: CSI- Joint Warfighter Medical Research	9.234	0.000	0.000	0.000	0.000
Description: Congressional Add In					
FY 2022 Plans: Congressional Add In					
FY 2023 Base Plans: Congressional Add In					
FY 2023 OOC Plans: N/A					
FY 2022 to FY 2023 Increase/Decrease Statement: Congressional Add In					
Accomplishments/Planned Programs Subtotals	9.234	0.000	0.000	0.000	0.000

C. Other Program Funding Summary (\$ in Millions)
N/A

Remarks

D. Acquisition Strategy
N/A

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Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130: <i>Defense Health Program I BA 2: RDT&E</i>					R-1 Program Element (Number/Name) PE 0605013DHA / <i>Information Technology Development</i>							
COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
Total Program Element	76.253	16.344	10.866	9.834	0.000	9.834	10.033	10.234	10.259	10.463	Continuing	Continuing
239H: <i>IM/IT Test Bed (Air Force) at DHA</i>	2.222	2.796	0.723	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
283C: <i>Medical Operational Data System (MODS) (Army)</i>	16.390	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
283L: <i>Pharmacovigilance Defense Application System</i>	2.048	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
283P: <i>Mobile HealthCare Environment (MHCE)</i>	1.856	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
423C: <i>Defense Center of Excellence (T2T/PBH TERM) (DHA)</i>	4.267	0.465	0.483	0.411	0.000	0.411	0.411	0.411	0.000	0.000	Continuing	Continuing
480D: <i>Defense Occupational and Environmental Health Readiness System - Industrial Hygiene (DOEHRS-IH) (Tri-Service)</i>	18.000	8.714	8.701	8.309	0.000	8.309	8.484	8.662	9.074	9.255	Continuing	Continuing
482A: <i>E-Commerce (DHA)</i>	18.156	4.369	0.959	1.114	0.000	1.114	1.138	1.161	1.185	1.208	Continuing	Continuing
485: <i>Legacy Data Repository (DHA-C)</i>	11.387	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
505: <i>Military Health System Virtual Health Program (MHS VHP)</i>	1.927	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Army Medical Command received PE 0605013 funding to identify, explore, and demonstrate key technologies to overcome medical and military unique technology barriers. Programs include Army service level support for the Medical Operational Data System (MODS); Army Medicine CIO Management Operations; Psychological and Behavioral Health – Tools for Evaluation, Risk, and Management (PBH-TERM); Pharmacovigilance Defense Application System (PVDAS); Mobile HealthCare Environment (MHCE); and the Defense Center of Excellence (DCoE).

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Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Defense Health Agency	Date: March 2022
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Appropriation/Budget Activity 0130: <i>Defense Health Program I BA 2: RDT&E</i>	R-1 Program Element (Number/Name) PE 0605013DHA / <i>Information Technology Development</i>
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For the Air Force, the funding in this program element provides for sustainment of the IM/IT Test Bed (IMIT-TB) capability, which is a dedicated OT location and staff encompassing the entire spectrum of healthcare services and products available in MTFs, to provide risk controlled testing of designated core and interim medical applications in a live environment.

Defense Health Agency (DHA) Health Information Technology (HIT) [previously known as Tri-Service IM/IT] - DHA HIT RDT&E activities includes funding for development/integration, modernization, test and evaluation for the Defense Health Agency initiatives, and any special interest that are shared within all centralized components of the Defense Health Program (DHP). HIT initiatives currently using RDT&E funding include: Defense Occupational and Environmental Health Readiness System – Industrial Hygiene (DOEHRS-IH) and Defense Center of Excellence (Telehealth and Technology Toolkit (T2T)).

The DHP RDT&E appropriation includes the following DHA initiatives: Electronic Commerce System (E-Commerce). E-Commerce was developed for centralized collection, integration, and reporting of accurate purchased care contracting and financial data. It provides an integrated set of data reports from multiple data sources to management, as well as tools to control the end-to-end program change management process. E-Commerce is composed of several major applications including: Contract Management (CM), utilizing Prism software to support contract action development and documentation; Resource Management (RM), employing Oracle Federal Financials and TED interface software to support the budgeting, accounting, case recoupment, and disbursement processes; Document Management, utilizing Document software to provide electronic storage, management, and retrieval of contract files; Management Tracking and Reporting, utilizing custom software to provide reports to assist in the management and tracking of changes to the managed care contracts as well as current and out year liabilities; the Purchased Care and Contractor’s Resource Center web sites that provide up-to-date financial information for both TMA and the Services concerning the military treatment facilities (MTFs), and expenditures for MTF enrollee purchased care and supplemental care. E-Commerce includes an infrastructure of over 60 servers supporting development, test, and production. E-Commerce is employed by several hundred users in more than 7 different organizations. Project oversight and coordination must be provided to ensure that the needs of the disparate organizations are met without influencing system performance or support to any individual user. Server configurations must remain current with respect to security policies, user authorizations, and interactions with other systems and functions. All of these activities must be managed and coordinated on a daily basis.

B. Program Change Summary (\$ in Millions)	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023 Base</u>	<u>FY 2023 OCO</u>	<u>FY 2023 Total</u>
Previous President's Budget	16.344	10.866	9.834	0.000	9.834
Current President's Budget	16.344	10.866	9.834	0.000	9.834
Total Adjustments	0.000	0.000	0.000	0.000	0.000
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency										Date: March 2022		
Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0605013DHA / <i>Information Technology Development</i>				Project (Number/Name) 239H / <i>IM/IT Test Bed (Air Force) at DHA</i>			
COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
239H: <i>IM/IT Test Bed (Air Force) at DHA</i>	2.222	2.796	0.723	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

A. Mission Description and Budget Item Justification

Continue to provide realistic, risk controlled testing of designated core and interim medical applications in an operationally realistic environment. Critical component of ongoing capability development & fielding efforts, ensuring that each is supported by an independent, unbiased assessment of effectiveness, suitability, security, and survivability in a realistic operational environment as required by the FAR 46.103, DoD 5000, and AFI 99-103. The AFMISTB is a complementary service to existing MHS developmental, integration, interoperability, and security testing facilities, forming a logical test process continuum leading to effective deployment decisions. Outcomes include decreasing life-cycle costs of IM/IT products by catching errors early in the acquisition process where they are less costly to fix, and increasing patient safety by fielding operationally tested medical information systems.

Previously reported under initiative IM/IT Test Bed (Air Force) Project Code 239F.

Operational control of funding was transferred from Air Force Medical Information Technology (IT) to Defense Health Agency Health Information Technology (DHA HIT) with the stand up of Defense Health Agency beginning in FY16. However, functionality for operational testing will remain with Air Force Medical IT.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Operational Testing Service	2.796	0.723	0.000	0.000	0.000
Description: A dedicated operational testing service, Test Bed conduct tests on various Air Force Medical Systems (AFMS). It provides risk controlled testing for designated core & interim medical applications in an operationally realistic environment.					
FY 2022 Plans: Will continue capability development & fielding efforts for half a dozen other ACAT III programs, initiate the Risk Management Framework reaccreditation for AF SG5T VPN for virtualization of IT Test Bed, and participate in at least half a dozen AF SG HPTs and requirement reviews					
FY 2023 Base Plans: Realignment of funding from RDT&E to O&M based on transitioning requirements					
FY 2023 OOC Plans: N/A					
FY 2022 to FY 2023 Increase/Decrease Statement:					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0605013DHA / <i>Information Technology Development</i>	Project (Number/Name) 239H / <i>IM/IT Test Bed (Air Force) at DHA</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Decrease due to realignment of funding from RDT&E to O&M based on transitioning requirements					
Accomplishments/Planned Programs Subtotals	2.796	0.723	0.000	0.000	0.000

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

D. Acquisition Strategy

Operational control of funding was transferred from Air Force Medical Information Technology (IT) to Defense Health Agency Health Information Technology (DHA HIT) with the stand up of Defense Health Agency beginning in FY16. However, functionality for operational testing will remain with Air Force Medical IT.

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0605013DHA / <i>Information Technology Development</i>	Project (Number/Name) 283C / <i>Medical Operational Data System (MODS) (Army)</i>
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
283C: <i>Medical Operational Data System (MODS) (Army)</i>	16.390	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Army Medical Command received PE 0605013 funding for the Medical Operational Data System (MODS) to deploy modernized data visualization capabilities to enhance Army Unit and Individual Medical Readiness Reporting. MODS provides Army leadership with a responsive and reliable human resource and readiness information management data system for all categories of military and civilian medical and support personnel. MODS provide Tri-Service support through applications such as Electronic Profile, Behavioral Health, and Medical Education.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Medical Operational Data System (MODS)	0.000	-	-	-	-
Description: Information management system to provide responsive and reliable human resource and medical readiness data for all categories of military and civilian medical and support personnel.					
Accomplishments/Planned Programs Subtotals	0.000	-	-	-	-

C. Other Program Funding Summary (\$ in Millions)

Line Item	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
• BA-1, 0807781HP: <i>Non-Central Information Management/Information Technology</i>	0.000	0.000	0.000	-	0.000	-	-	-	-	Continuing	Continuing
• BA-3, 0807721HP: <i>Replacement/Modernization</i>	0.000	0.000	0.000	-	0.000	-	-	-	-	Continuing	Continuing

Remarks

D. Acquisition Strategy

Select the business, technical, and contract actions that will minimize cost, reduce program risk, and remain within schedule while meeting program objectives.

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0605013DHA / <i>Information Technology Development</i>	Project (Number/Name) 283L / <i>Pharmacovigilance Defense Application System</i>
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
283L: <i>Pharmacovigilance Defense Application System</i>	2.048	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Army Medical Command received PE 0605013 funding to identify, explore, and demonstrate key information technologies to overcome medical and military unique technology barriers. The Pharmacovigilance Defense Application System (PVDAS) provides military providers Defense Patient Safety reports from the Food and Drug Administration (FDA) after a drug's release to market.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Pharmacovigilance Defense Application System (PVDAS)	0.000	-	-	-	-
Description: The Pharmacovigilance Defense Application System (PVDAS) provides military providers Defense Patient Safety reports from the Food and Drug Administration (FDA) after a drug's release to market.					
Accomplishments/Planned Programs Subtotals	0.000	-	-	-	-

C. Other Program Funding Summary (\$ in Millions)

Line Item	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
• BA-1, 0807781HP: <i>Non-Central Information Management/ Information Technology</i>	0.000	0.000	0.000	-	0.000	-	-	-	-	Continuing	Continuing
• BA-1, 0807714HP: <i>Other Health Activities</i>	0.000	0.000	0.000	-	0.000	-	-	-	-	Continuing	Continuing
• BA-1, 0807798HP: <i>Management Headquarters</i>	0.000	0.000	0.000	-	0.000	-	-	-	-	Continuing	Continuing

Remarks

D. Acquisition Strategy

Evaluate and use the most appropriate business, technical, contract and support strategies and acquisition approach to minimize costs, reduce program risks, and remain within schedule while meeting program objectives. Strategy is revised as required as a result of periodic program reviews or major decisions.

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0605013DHA / <i>Information Technology Development</i>	Project (Number/Name) 283P / <i>Mobile HealthCare Environment (MHCE)</i>
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
283P: <i>Mobile HealthCare Environment (MHCE)</i>	1.856	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Army Medical Command received PE 0605013 funding to identify, explore, and demonstrate key information technologies to overcome medical and military unique technology barriers. The Mobile HealthCare Environment (MHCE) is the capability of secure, bidirectional messaging and data exchange between patients, providers and clinics using any electronic device.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Mobile HealthCare Environment (MHCE)	0.000	-	-	-	-
Description: The Mobile HealthCare Environment (MHCE) is the capability of secure, bidirectional messaging and data exchange between patients, providers and clinics using any electronic device.					
Accomplishments/Planned Programs Subtotals	0.000	-	-	-	-

C. Other Program Funding Summary (\$ in Millions)

Line Item	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
• BA-1, 0807781HP: <i>Non-Central Information Management/Information Technology</i>	0.000	0.000	0.000	-	0.000	-	-	-	-	-	Continuing

Remarks

D. Acquisition Strategy

Evaluate and use the most appropriate business, technical, contract and support strategies and acquisition approach to minimize costs, reduce program risks, and remain within schedule while meeting program objectives. Strategy is revised as required as a result of periodic program reviews or major decisions.

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency										Date: March 2022		
Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0605013DHA / <i>Information Technology Development</i>				Project (Number/Name) 423C / <i>Defense Center of Excellence (T2T/PBH TERM) (DHA)</i>			
COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
423C: <i>Defense Center of Excellence (T2T/PBH TERM) (DHA)</i>	4.267	0.465	0.483	0.411	0.000	0.411	0.411	0.411	0.000	0.000	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Defense Centers of Excellence for Psychological Health and Traumatic Brain Injury (DCoE) provides the Military Health System with current and emerging psychological health and traumatic brain injury clinical and educational information. DCOE identifies gaps and prioritize needs in psychological health and TBI research, and then translate that research into clinical practice to improve patient outcomes.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Defense Center of Excellence (DHA) T2T and PBH TERM	0.465	0.483	0.411	0.000	0.411
<p>Description: DCoE programs and products are developed and implemented to drive innovation across the continuum of care by identifying treatment options and other clinical and research methods that deliver superior healthcare outcomes. Products range from tools customized for healthcare providers to electronic resources such as online games and mobile apps for Service Members and their Families.</p> <p>Telehealth and Technology Toolkit (T2T): This project will organize a toolkit of components in the areas of PH and telehealth that can be used both within and outside DoD. The focus of the toolkit is NOT to develop duplicative components, but allow room for collaboration and remote access to tools. The T2 Toolkit consists of mobile applications, 3-Dimensional applications (apps), and supporting websites. These applications will combine to create a system that covers many areas of Psychological Health (PH) for the Department of Defense, family members.</p> <p>Psychological and Behavioral Health – Tools for Evaluation, Risk and Management (PBH-TERM) is a web-based psychological and behavioral health (BH) information technology application which supports evidence-based, standardized and integrated BH initiatives and program evaluation.</p> <p>FY 2022 Plans: Will continue support for web services development software.</p> <p>FY 2023 Base Plans: Will continue support for web services development software.</p> <p>FY 2023 OOC Plans:</p>					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0605013DHA / <i>Information Technology Development</i>	Project (Number/Name) 423C / <i>Defense Center of Excellence (T2T/PBH TERM) (DHA)</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
N/A					
<i>FY 2022 to FY 2023 Increase/Decrease Statement:</i> Increase due to planned requirements for web services development software in FY23.					
Accomplishments/Planned Programs Subtotals	0.465	0.483	0.411	0.000	0.411

C. Other Program Funding Summary (\$ in Millions)
N/A

Remarks

D. Acquisition Strategy

Evaluate and use the most appropriate business, technical, contract and support strategies and acquisition approach to minimize costs, reduce program risks, and remain within schedule while meeting program objectives. Strategy is revised as required as a result of periodic program reviews or major decisions.

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0605013DHA / Information Technology Development	Project (Number/Name) 480D / Defense Occupational and Environmental Health Readiness System - Industrial Hygiene (DOEHRS-IH) (Tri-Service)
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
480D: Defense Occupational and Environmental Health Readiness System - Industrial Hygiene (DOEHRS-IH) (Tri-Service)	18.000	8.714	8.701	8.309	0.000	8.309	8.484	8.662	9.074	9.255	Continuing	Continuing

A. Mission Description and Budget Item Justification

Defense Occupational and Environmental Health Readiness System - Industrial Hygiene (DOEHRS-IH) is a comprehensive, automated information system that provides a single point for assembling, comparing, using, evaluating, and storing occupational personnel exposure information, workplace environmental monitoring data, personnel protective equipment usage data, observation of work practices data, and employee health hazard educational data. DOEHRS-IH will provide for the definition, collection and analysis platform to generate and maintain a Service Member Longitudinal Exposure Record. DOEHRS-IH will describe the exposure assessment, identify similar exposure groups, establish a longitudinal exposure record baseline to facilitate post-deployment follow-up, and provide information to enable exposure-based medical surveillance and risk reduction.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
<p>Title: Defense Occupational and Environmental Health Readiness System - Industrial Hygiene (DOEHRS-IH) (Tri-Service)</p> <p>Description: Configure, enhance, and interface DOEHRS-IH modules.</p> <p>FY 2022 Plans: Will continue software development and significant enhancements to existing software to include implementation of a DOEHRS-IH HAZMAT/SDS capability, DOEHRS-IH to DOEHRS-HC Interface, DOEHRS-IH Interface Design/Development to the Defense Medical Logistics – Enterprise Solution (DML-ES), Thermal Stress Design/Development, Confined Spaces Design/Development and Critical User Enhancements.</p> <p>FY 2023 Base Plans: Will continue software development and significant enhancements to existing software to include implementation of a DOEHRS-IH HAZMAT/SDS capability, DOEHRS-IH to DOEHRS-HC Interface, DOEHRS-IH Interface</p>	8.714	8.701	8.309	0.000	8.309

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency	Date: March 2022
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Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0605013DHA / <i>Information Technology Development</i>	Project (Number/Name) 480D / <i>Defense Occupational and Environmental Health Readiness System - Industrial Hygiene (DOEHRS-IH) (Tri-Service)</i>
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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Design/Development to the Defense Medical Logistics – Enterprise Solution (DML-ES), Thermal Stress Design/Development, Confined Spaces Design/Development and Critical User Enhancements. FY 2023 OOC Plans: N/A FY 2022 to FY 2023 Increase/Decrease Statement: Funding decreased based on requirements for FY 2023.					
Accomplishments/Planned Programs Subtotals	8.714	8.701	8.309	0.000	8.309

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

D. Acquisition Strategy

Evaluate and use the most appropriate business, technical, contract and support strategies and acquisition approach to minimize costs, reduce program risks, and remain within schedule while meeting program objectives. Strategy is revised as required as a result of periodic program reviews or major decisions.

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency										Date: March 2022		
Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0605013DHA / <i>Information Technology Development</i>				Project (Number/Name) 482A / <i>E-Commerce (DHA)</i>			
COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
482A: <i>E-Commerce (DHA)</i>	18.156	4.369	0.959	1.114	0.000	1.114	1.138	1.161	1.185	1.208	Continuing	Continuing

A. Mission Description and Budget Item Justification

The DHP, RDT&E appropriation includes the following TMA initiatives: Electronic Commerce System(E-Commerce): This system was developed for centralized collection, integration, and reporting of accurate purchased care contracting and financial data. It provides an integrated set of data reports from multiple data sources to management, as well as tools to control the end-to-end program change management process. E-Commerce replaces multiple legacy systems. E-Commerce consists of several major subsystems including: CM subsystem utilizing Prism software to support contract action development and documentation; the RM subsystem utilizing Oracle Federal Financials and TED interface software to support the budgeting, accounting, case recoupment, and disbursement processes; the document management subsystem utilizing Documentum software to provide electronic storage, management, and retrieval of contract files; Management Tracking and Reporting subsystem utilizing custom software to provide reports to assist in the management and tracking of changes to the managed care contracts as well as current and out year liabilities; the Purchased Care Web site that provides up-to-date financial information for both TMA and the Services concerning the military treatment facilities' (MTFs') expenditures for MTF enrollee purchased care and supplemental care. E-Commerce includes 5 major subsystems and over 60 servers supporting development, test, and production. The system will be utilized by several hundred users in more than 7 different organizations. Project oversight and coordination must be provided to ensure that the needs of the disparate organizations are met without impacting the system performance or support to any individual user. Server configurations must be kept current in terms of security policies, user authorizations, and interactions with other systems and functions. All of these activities must be managed and coordinated on a daily basis.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: E-Commerce (DHA)	4.369	0.959	1.114	0.000	1.114
Description: The DHP, RDT&E appropriation includes the following TMA initiatives: Electronic Commerce System(E-Commerce): This system was developed for centralized collection, integration, and reporting of accurate purchased care contracting and financial data. It provides an integrated set of data reports from multiple data sources to management, as well as tools to control the end-to-end program change management process. E-Commerce replaces multiple legacy systems. E-Commerce consists of several major subsystems including: CM subsystem utilizing Prism software to support contract action development and documentation; the RM subsystem utilizing Oracle Federal Financials and TED interface software to support the budgeting, accounting, case recoupment, and disbursement processes; the document management subsystem utilizing Documentum software to provide electronic storage, management, and retrieval of contract files; Management Tracking and Reporting subsystem utilizing custom software to provide reports to assist in the management and tracking of changes to the managed care contracts as well as current and out year liabilities; the Purchased Care Web site that provides up-to-date financial information for both TMA and the Services concerning the military treatment facilities' (MTFs') expenditures for MTF enrollee purchased care and supplemental care. E-					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0605013DHA / <i>Information Technology Development</i>	Project (Number/Name) 482A / <i>E-Commerce (DHA)</i>
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B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
<p>Commerce includes 5 major subsystems and over 60 servers supporting development, test, and production. The system will be utilized by several hundred users in more than 7 different organizations. Project oversight and coordination must be provided to ensure that the needs of the disparate organizations are met without impacting the system performance or support to any individual user. Server configurations must be kept current in terms of security policies, user authorizations, and interactions with other systems and functions. All of these activities must be managed and coordinated on a daily basis.</p> <p>FY 2022 Plans: Will continue to modernize the Electronic Commerce System for contracts, and reporting as well as adapting to health care policy and guidance.</p> <p>FY 2023 Base Plans: Will continue to modernize the Electronic Commerce System for contracts, and reporting as well as adapting to health care policy and guidance.</p> <p>FY 2023 OOC Plans: N/A</p> <p>FY 2022 to FY 2023 Increase/Decrease Statement: Realigned funding to DHP O&M as parts of the system transition to sustainment</p>					
Accomplishments/Planned Programs Subtotals	4.369	0.959	1.114	0.000	1.114

C. Other Program Funding Summary (\$ in Millions)

<u>Line Item</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023 Base</u>	<u>FY 2023 OCO</u>	<u>FY 2023 Total</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>Cost To Complete</u>	<u>Total Cost</u>
• BA-1, 0807752HP:	0.132	0.135	0.138	-	0.138	-	-	-	-	Continuing	Continuing
<i>Miscellaneous Support Activities</i>											
• BA-3, 0807721HP:	0.571	0.583	0.595	-	0.595	-	-	-	-	Continuing	Continuing
<i>Replacement/Modernization</i>											

Remarks

D. Acquisition Strategy

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency										Date: March 2022		
Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0605013DHA / <i>Information Technology Development</i>				Project (Number/Name) 485 / <i>Legacy Data Repository (DHA-C)</i>			
COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
485: <i>Legacy Data Repository (DHA-C)</i>	11.387	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Legacy Data Repository (LDR) will provide the strategy, analysis, and solution to assume data management and governance for legacy Clinical and Business data for Defense Health Agency’s Solutions Delivery Division systems that will be decommissioned as the Military Health System (MHS) Genesis electronic health record is deployed.

As MHS Genesis deploys to each site, legacy systems cannot decommission without a legacy data repository to safely and securely migrate data – absence a LDR solution negates and ignores the underlying requirement. Clinicians without access to legacy patient history can create a direct patient safety issue. The legacy component of a patient’s Legal Medical Record will no longer be accessible once MHS Genesis rolls out.

LDR will identify, capture, organize, disseminate, and synthesize required legacy data needed to support medical information requirements for Business Intelligence (BI), Continuity of Care, and Archival in support of Defense Health Modernization Systems (DHMS) deployment plans, legacy system decommissioning plans, and operations and sustainment activities within their areas of responsibility.

This initial investment would allow the MHS to realize cost savings by decommissioning systems with overlapping capabilities to MHS Genesis, and reduce the legacy system footprint across the enterprise. Further, LDR would make legacy data available for clinicians through a clinical viewer to compliment the longitudinal record of MHS Genesis. This project will enable clinicians to holistically view a service member's medical record through both MHS Genesis and a legacy viewer. Downstream system dependent on legacy data would also be benefited through a persistence of this information.

As the LDR takes responsibility for legacy data, it must be retained within a flexible, scalable, and cost effective platform, but must also maintain the discipline of existing MHS data governance and management standards. While meeting these data governance and management standards, legacy data will be maintained in a variety of formats and degrees of normalization and structuring (i.e. discrete data, document, object, and file level).

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Legacy Data Repository	0.000	-	-	-	-
Description: LDR will identify, capture, organize, disseminate, and synthesize required legacy data needed to support medical information requirements for Business Intelligence (BI), Continuity of Care, and Archival in support of Defense Health Modernization Systems (DHMS) deployment plans, legacy system decommissioning plans, and operations and sustainment activities within their areas of responsibility.					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0605013DHA / <i>Information Technology Development</i>	Project (Number/Name) 485 / <i>Legacy Data Repository (DHA-C)</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Accomplishments/Planned Programs Subtotals	0.000	-	-	-	-

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

D. Acquisition Strategy

Evaluate and use the most appropriate business, technical, contract and support strategies and acquisition approach to minimize costs, reduce program risks, and remain within schedule while meeting program objectives. Strategy is revised as required as a result of periodic program reviews or major decisions.

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency										Date: March 2022		
Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0605013DHA / <i>Information Technology Development</i>				Project (Number/Name) 505 / <i>Military Health System Virtual Health Program (MHS VHP)</i>			
COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
505: <i>Military Health System Virtual Health Program (MHS VHP)</i>	1.927	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

A. Mission Description and Budget Item Justification

Purpose: Establish a unified MHS program to augment military medicine with robust 'anywhere' virtual health capabilities. The program will include three distinct capabilities in order to meet its initial expected business outcome. The first capability will incorporate secure clinical VTC (synchronous visits) to enable a provider in one location to offer diagnosis and treatment to a patient in another location. Synchronous visits can take place between a provider and patient at different MTFs, or at the patient's location (e.g. their home or other location deemed appropriate by the provider). Synchronous visits at the patient's location can be conducted for primary or specialty care. Primary and Specialty Care appointments via synchronous visits will enable health care anytime, anywhere. The second capability incorporates an Asynchronous secure portal or teleconsultation portal, to enable a pool of specialty care providers globally to deliver timely clinical advice, primarily in operational settings where expertise is scarce, but also in garrison when needed. The portal facilitates 'store and forward' transmission of electronic medical information and associated digital images between health care providers. Specialty clinicians provide expert advice and guidance to the patient's attending physicians, assisting them in the disposition or local treatment options. The third capability is remote health monitoring, to collect, track, and transmit biometric data from the patient via a secure portal to an MTF. The data is accessed by a care coordinator or health care provider at the MTF to provide real-time medical interventions that can improve a patient's health and quality of life.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Military Health System Virtual Health Program (MHS VHP)	0.000	-	-	-	-
Description: GOAL: The MHS VHP will connect our beneficiaries to health care globally to increase readiness, access, quality, and patient safety.					
BENEFIT: Using VH, the best of MHS Medicine across the world can be brought to the patient wherever they are – deployed or in garrison. As a modality without geographic limits, VH extends access to quality primary care, behavioral health, and medical specialty care to remote locations where beneficiaries may be geographically separated from comprehensive Military Treatment Facility (MTF) based care, and where such care is not readily available in the surrounding community. Additionally, VH can help the MHS use its clinical capacity more effectively; cross-leveraging clinical expertise when and where it is needed.					
Accomplishments/Planned Programs Subtotals	0.000	-	-	-	-

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0605013DHA / <i>Information Technology Development</i>	Project (Number/Name) 505 / <i>Military Health System Virtual Health Program (MHS VHP)</i>

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

D. Acquisition Strategy

To be determined as program matures.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130: <i>Defense Health Program I BA 2: RDT&E</i>	R-1 Program Element (Number/Name) PE 0605026DHA I <i>Information Technology Development - DoD Healthcare Management System Modernization (DHMSM)</i>
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
Total Program Element	62.946	18.336	15.751	12.024	0.000	12.024	12.264	6.144	6.038	5.141	Continuing	Continuing
483A: <i>Information Technology Development - DoD Healthcare Management System Modernization (DHMSM) at DHA</i>	62.946	18.336	15.751	12.024	0.000	12.024	12.264	6.144	6.038	5.141	Continuing	Continuing

Program MDAP/MAIS Code:
Project MDAP/MAIS Code(s): 496

Note

n/a

A. Mission Description and Budget Item Justification

DHMSM will replace the DoD legacy healthcare management systems with a commercial off-the-shelf capability that is open, modular, and standards-based with non-proprietary interfaces. DHMSM will support the Department’s goals of net- centrality by providing a framework for full human and technical connectivity and interoperability that allows DoD users and mission partners to share the information they need, when they need it, in a form they can understand and act on with confidence, and protects information from those who should not have it. Once fielded, the Electronic Health Record (EHR) will support the following healthcare activities for DoD’s practitioners and beneficiaries:

- Clinical workflow and provider clinical decision support;
- Capture, maintain, use, protect, preserve and share health data and information;
- Retrieval and presentation of health data and information that is meaningful for EHR users regardless of where the patient’s records are physically maintained; and
- Analysis and management of health information from multiple perspectives to include population health, military medical readiness, clinical quality, disease management, and medical research.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Defense Health Agency	Date: March 2022
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Appropriation/Budget Activity 0130: <i>Defense Health Program I BA 2: RDT&E</i>	R-1 Program Element (Number/Name) PE 0605026DHA I <i>Information Technology Development - DoD Healthcare Management System Modernization (DHMSM)</i>
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B. Program Change Summary (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Previous President's Budget	18.336	15.751	12.024	0.000	12.024
Current President's Budget	18.336	15.751	12.024	0.000	12.024
Total Adjustments	0.000	0.000	0.000	0.000	0.000
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0605026DHA / <i>Information Technology Development - DoD Healthcare Management System Modernization (DHMSM)</i>	Project (Number/Name) 483A / <i>Information Technology Development - DoD Healthcare Management System Modernization (DHMSM) at DHA</i>
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
483A: <i>Information Technology Development - DoD Healthcare Management System Modernization (DHMSM) at DHA</i>	62.946	18.336	15.751	12.024	0.000	12.024	12.264	6.144	6.038	5.141	Continuing	Continuing

Project MDAP/MAIS Code: 496

A. Mission Description and Budget Item Justification

The DHMSM program acquired an integrated inpatient/outpatient Best of Suite (BoS) electronic health record (EHR) solution, augmented by the Best of Breed (BoB) product(s). The overarching goal of the program is to enable healthcare teams to deliver high-quality, safe care and preventive services to patients through the use of easily accessible standards-based computerized patient records. The anticipated benefits include: improved accuracy of diagnoses and medication; improved impact on health outcomes; increased patient participation in the healthcare process; improved patient-centered care coordination; and increased practice efficiencies in all settings, including all DoD operational environments.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: DoD Healthcare Management System Modernization (DHMSM) Program	18.336	15.751	12.024	0.000	12.024
<p>Description: DHMSM will replace the DoD legacy healthcare management systems with a commercial off-the-shelf capability that is open, modular, and standards-based. DHMSM will support the Department's goals of net-centricity by providing a framework for full human and technical connectivity and interoperability that allows DoD users and mission partners to share the information they need, when they need it, in a form they can understand and act on with confidence, and protects information from those who should not have it. Once fielded, the EHR will support the following healthcare activities for DoD's practitioners and beneficiaries:</p> <ul style="list-style-type: none"> • Clinical workflow and provider clinical decision support; • Capture, maintain, use, protect, preserve and share health data and information; • Retrieval and presentation of health data and information that is meaningful for EHR users regardless of where the patient's records are physically maintained; and • Analysis and management of health information from multiple perspectives to include population health, military medical readiness, clinical quality, disease management, and medical research. 					
<p>FY 2022 Plans: FY 2022 Plans:</p>					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0605026DHA / <i>Information Technology Development - DoD Healthcare Management System Modernization (DHMSM)</i>	Project (Number/Name) 483A / <i>Information Technology Development - DoD Healthcare Management System Modernization (DHMSM) at DHA</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
<p>FY22 RDT&E:</p> <ul style="list-style-type: none"> • Conduct Test Planning of new interfaces, patches, and of semi-annual releases. • Support configuration efforts for approved enhancements. <p>FY22 Procurement:</p> <ul style="list-style-type: none"> • Purchase required commercial software licenses and perform multiple deployments of the modernized DHMSM EHR to MTFs. • Support Deployment activities to include site visits, localized configuration, deployment activities and on-site deployment support for multiple Wave Deployments (each containing multiple MTFs and Clinics). <p>FY22 O&M:</p> <ul style="list-style-type: none"> • Operate and maintain DHMSM system, including recurring configuration, integration, and test activities, software license maintenance, hardware refresh, system hosting, and recurring change management and training as applicable. • Continue business management operations and contract management oversight. <p>FY 2023 Base Plans:</p> <p>FY23 RDT&E:</p> <ul style="list-style-type: none"> • Conduct Test Planning of new interfaces, patches, and of semi-annual releases. • Support configuration efforts for approved enhancements. • Conduct Test Planning of new interfaces, patches, and of semi-annual releases. • Support configuration efforts for approved enhancements. <p>FY23 Procurement:</p> <ul style="list-style-type: none"> • Purchase required commercial software licenses and perform multiple deployments of the modernized DHMSM EHR to MTFs. • Support Deployment activities to include site visits, localized configuration, deployment activities and on-site deployment support for multiple Wave Deployments (each containing multiple MTFs and Clinics). <p>FY23 O&M:</p> <ul style="list-style-type: none"> • Operate and maintain DHMSM system, including recurring configuration, integration, and test activities, software license maintenance, hardware refresh, system hosting, and recurring change management and training as applicable. • Continue business management operations and contract management oversight. <p>FY 2023 OOC Plans:</p>					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0605026DHA / <i>Information Technology Development - DoD Healthcare Management System Modernization (DHMSM)</i>	Project (Number/Name) 483A / <i>Information Technology Development - DoD Healthcare Management System Modernization (DHMSM) at DHA</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
N/A					
<i>FY 2022 to FY 2023 Increase/Decrease Statement:</i> FY 2022 RDT&E funds decrease in accordance with acquisition schedule.					
Accomplishments/Planned Programs Subtotals	18.336	15.751	12.024	0.000	12.024

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

D. Acquisition Strategy

Evaluate and use the most appropriate business, technical, contract and support strategies and acquisition approach to minimize costs, reduce program risks, and remain within schedule while meeting program objectives. Strategy is revised as required as a result of periodic program reviews or major decisions.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130: <i>Defense Health Program I BA 2: RDT&E</i>	R-1 Program Element (Number/Name) PE 0605045DHA I <i>Joint Operational Medicine Information System (JOMIS)</i>
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
Total Program Element	133.201	46.214	52.948	18.082	0.000	18.082	18.731	21.984	23.014	24.273	Continuing	Continuing
447A: <i>Joint Operational Medicine Information System (JOMIS)</i>	133.201	46.214	52.948	18.082	0.000	18.082	18.731	21.984	23.014	24.273	Continuing	Continuing

Program MDAP/MAIS Code: 521

A. Mission Description and Budget Item Justification

The Joint Operational Medicine Information Systems (JOMIS) Portfolio Program will acquire solutions to modernize, deploy, and sustain the Department of Defense's (DoD) operational medicine (OpMed) information systems (IS) capabilities. OpMed systems provide commanders and medical professionals with integrated, timely, and accurate information to make critical command and control and medical decisions. These operational systems will function in constrained, intermittent, and non-existent communications environments while providing access to authoritative sources of clinical data. The JOMIS Program is a declared Joint Interest for capability requirements executed under the Adaptive Acquisition Framework.

JOMIS will pursue efforts that allow it to sunset costly and difficult to maintain legacy systems in conjunction with functional Subject Matter Experts (SME), Service representatives, Combatant Commanders (CCMD), and the Defense Health Agency's (DHA) Joint Chiefs of Staff (J6) Solutions Delivery Division and Cyber Divisions. The Theater Medical Information Requirement Information Systems Capabilities Development Document (TMIR IS CDD) and the Joint Requirements Oversight Council Memorandum (JROCM) signed February 28, 2017 document the knowledge management capabilities required to enable the following health care functions: Health Care Delivery (HCD), Medical Logistics (MedLOG), Medical Command and Control (MedC2), Medical Situational Awareness (MedSA) and Patient Movement.

B. Program Change Summary (\$ in Millions)

	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023 Base</u>	<u>FY 2023 OCO</u>	<u>FY 2023 Total</u>
Previous President's Budget	46.214	52.948	18.082	0.000	18.082
Current President's Budget	46.214	52.948	18.082	0.000	18.082
Total Adjustments	0.000	0.000	0.000	0.000	0.000
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency										Date: March 2022		
Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0605045DHA / Joint Operational Medicine Information System (JOMIS)				Project (Number/Name) 447A / Joint Operational Medicine Information System (JOMIS)			
COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
447A: Joint Operational Medicine Information System (JOMIS)	133.201	46.214	52.948	18.082	0.000	18.082	18.731	21.984	23.014	24.273	Continuing	Continuing

A. Mission Description and Budget Item Justification

The purpose of JOMIS is to modernize, deploy, and sustain the DoD’s OpMed IS capabilities that enable comprehensive health services to meet Warfighter requirements for military medical operations. JOMIS is intended to function in constrained, intermittent, and non-existent communications environments while providing access to authoritative sources of clinical data.

There are technological and business challenges to the OpMed mission including aged technology, inefficient design standards, overreliance on obsolete code, lack of automation, different deployment methods by Services that impacts standard user adoption, inefficient and overly-bureaucratic acquisition methods, and the lack of unified functional user input. To mitigate these challenges, JOMIS has planned the following actions:

Translate the TMIR IS CDD into a modern Portfolio Capability Roadmap that can be abstracted down to needs statements, personas, and user stories that can inform leading-edge design practices

- Construct program governance that can be achieved through external consultancy and resource investment into an Operational Medicine Functional Champion (OMFC) to create a high achieving team that envisions the future of OpMed capabilities as they are integrated with DoD and Federal medical data landscapes
- Leverage experiential learning on current innovative projects that provide ample opportunities to explore modern software delivery methods that can create and endure software delivery environments that evolve with the OpMed mission
- Take advantage of industry and DoD best practices to evolve and perfect development methods (e.g., Agile and Development Security Operations) which will facilitate the ability to “continuously integrate” and “continuously deliver” capability throughout the software development life cycle

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Joint Operational Medicine Information System (JOMIS)	46.214	52.948	18.082	0.000	18.082
Description: Description: Specific contribution to mission delivery: The JOMIS Portfolio Program will acquire solutions to modernize, deploy, and sustain the DoD’s OpMed IS capabilities. OpMed systems provide commanders and medical professionals with integrated, timely, and accurate information to make critical command and control and medical decisions. These operational systems will function in constrained, intermittent, and non-existent communications environments while providing access to authoritative sources of clinical data.					
FY 2022 Plans: • Execute OpMed Capability Roadmap					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0605045DHA / Joint Operational Medicine Information System (JOMIS)	Project (Number/Name) 447A / Joint Operational Medicine Information System (JOMIS)

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
<ul style="list-style-type: none"> Acquire Continuous Integration/Continuous Delivery platform to ensure stable, cyber-secure infrastructure for development, testing, training, and production Initiate development of Operational Medicine Data Service (OMDS) Acquire software and application development services through Multi-award Contract Execute Healthcare Delivery development plan including development of MHS GENESIS-Theater, Role 1 and 2, and Theater Blood Management system <p>FY 2023 Base Plans:</p> <ul style="list-style-type: none"> Continue to execute OpMed Capability Roadmap Continue development of Operational Medicine Data Service (OMDS) Continue new Healthcare Delivery (HCD) capability development, system integration and testing activities including development of MHS GENESIS-Theater and Theater Blood Management system. Conduct Test Planning of new interfaces, patches, and Minimum Viable Capability releases (MVCR). <p>FY 2023 OOC Plans: N/A</p> <p>FY 2022 to FY 2023 Increase/Decrease Statement: Reflects the program's updated strategy and timeline.</p>					
Accomplishments/Planned Programs Subtotals	46.214	52.948	18.082	0.000	18.082

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

n/a

D. Acquisition Strategy

In FY21 JOMIS received approval of a new Acquisition Strategy from its Milestone Decision Authority (MDA). The FY21 Overarching Portfolio Acquisition Strategy allows JOMIS to acquire solutions across all five Healthcare functions as described in the TMIR IS CDD. Further, the Portfolio Acquisition Strategy allows JOMIS to utilize the Adaptive Acquisition Framework and the Software Pathway of Acquisition to continuously enhance existing capabilities and deliver new capabilities prioritized by the OpMed Functional Community. The Portfolio Acquisition Strategy ensures that the JOMIS Program will evaluate and use the most appropriate business, technical, contract and support strategies, and acquisition approaches to minimize costs, reduce program risks, and remain within the schedule while meeting program objectives.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130: <i>Defense Health Program I BA 2: RDT&E</i>	R-1 Program Element (Number/Name) PE 0605145DHA I <i>Medical Products and Support Systems Development</i>
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
Total Program Element	72.921	21.068	21.489	64.030	0.000	64.030	58.562	57.895	62.193	63.048	Continuing	Continuing
500A: <i>CSI - Congressional Special Interests</i>	18.382	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
375: <i>GDF - Medical Products and Support System Development</i>	54.539	21.068	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
375A: <i>GDF - Medical Simulation and Training</i>	0.000	0.000	2.000	2.000	0.000	2.000	2.000	2.000	2.000	2.040	Continuing	Continuing
375B: <i>GDF - Medical Readiness</i>	0.000	0.000	8.536	5.725	0.000	5.725	5.674	5.967	7.490	7.641	Continuing	Continuing
375C: <i>GDF - Medical Combat Support</i>	0.000	0.000	10.953	14.194	0.000	14.194	14.683	14.838	13.770	14.045	Continuing	Continuing
375D: <i>GDF - Medical Products and Support System Development</i>	0.000	0.000	0.000	42.111	0.000	42.111	36.205	35.090	38.933	39.322	Continuing	Continuing

A. Mission Description and Budget Item Justification

Guidance for Development of the Force – Medical Products and Support Systems Development: This program element (PE) provides funding for system development and demonstration of medical commodities delivered from the various medical advanced development and prototyping Department of Defense (DoD) Components that are directed at meeting validated requirements prior to full-rate initial production and fielding, including initial operational test and evaluation and clinical trials for products that require US Food and Drug Administration approval.

Development, test, and evaluation in this PE is designed to address requirements identified through the Joint Capabilities Integration and Development System and other Department of Defense operational needs. Medical development, test, and evaluation priorities for the Defense Health Program (DHP) are guided by, and will support, the National Defense Strategy, the Joint Staff Surgeon’s Joint Concept for Health Services, and other overarching DoD strategic framework documents.

Coordination occurs through the planning and execution activities of the Defense Health Agency Component Acquisition Executive (DHA CAE) as the Milestone Decision Authority for medical materiel development efforts. As technologies mature, the most promising efforts will transition to production and deployment.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130: <i>Defense Health Program I BA 2: RDT&E</i>	R-1 Program Element (Number/Name) PE 0605145DHA I <i>Medical Products and Support Systems Development</i>
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B. Program Change Summary (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Previous President's Budget	21.068	21.489	64.030	0.000	64.030
Current President's Budget	21.068	21.489	64.030	0.000	64.030
Total Adjustments	0.000	0.000	0.000	0.000	0.000
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			

Congressional Add Details (\$ in Millions, and Includes General Reductions)

Project: 500A: *CSI - Congressional Special Interests*

 Congressional Add: *CSI - Congressional Speical Interest*

Congressional Add Subtotals for Project: 500A

Project: 375D: *GDF - Medical Products and Support System Development*

 Congressional Add: *GDF MPSACD Medical Products and Support System Development*

Congressional Add Subtotals for Project: 375D

Congressional Add Totals for all Projects

	FY 2021	FY 2022
	0.000	-
	0.000	-
	0.000	0.000
	0.000	0.000
	0.000	0.000

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0605145DHA / Medical Products and Support Systems Development	Project (Number/Name) 500A / CSI - Congressional Special Interests
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
500A: CSI - Congressional Special Interests	18.382	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

A. Mission Description and Budget Item Justification

In FY 2019, the Defense Health Program funded Congressional Special Interest (CSI) directed research. The strategy for the FY 2018 Congressionally-directed research program is to stimulate innovative research through a competitive, focused, peer-reviewed medical research at intramural and extramural research sites. Because of the CSI annual structure, out-year funding is not programmed.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022
Congressional Add: CSI - Congressional Special Interest	0.000	-
FY 2021 Accomplishments: No CSI		
Congressional Adds Subtotals	0.000	-

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0605145DHA / Medical Products and Support Systems Development	Project (Number/Name) 375 / GDF - Medical Products and Support System Development
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
375: GDF - Medical Products and Support System Development	54.539	21.068	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

Note
Starting in FY2022 Project 375 is being realigned into Projects 375A, 375B, and 375C.

A. Mission Description and Budget Item Justification

Guidance for Development of the Force-Medical Products and Support Systems Development: This funding supports materiel development activities that further system development and demonstration prior to initial full rate production and fielding of commodities.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: GDF - Medical Products and Support Systems Development (GDF-MPSSD)	21.068	-	-	-	-
Description: GDF-Medical Products and Support Systems Development: This funding supports activities to support system development and demonstration prior to initial full rate production and fielding of medical commodities delivered from 0604110HP (Medical Products Support and Advanced Concept Development). Materiel development may include accelerated transition of US Food and Drug Administration (FDA)-licensed and unregulated products through clinical and field validation studies, advanced prototyping, risk reduction, operational test and evaluation, manufacturing, and product transition efforts for medical information technology applications and medical training systems technologies.					
Accomplishments/Planned Programs Subtotals	21.068	-	-	-	-

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency										Date: March 2022		
Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0605145DHA / Medical Products and Support Systems Development				Project (Number/Name) 375A / GDF - Medical Simulation and Training			
COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
375A: GDF - Medical Simulation and Training	0.000	0.000	2.000	2.000	0.000	2.000	2.000	2.000	2.000	2.040	Continuing	Continuing

Note
Starting in FY 2022, Project 375A was realigned from Project 375. This Project is not a new start.

A. Mission Description and Budget Item Justification

Guidance for Development of the Force-Medical Simulation and Training: This funding supports material development activities that enhance system development and demonstration prior to initial full rate production and fielding of capabilities.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: GDF - Medical Simulation and Training	0.000	2.000	2.000	0.000	2.000
Description: GDF-Medical Products and Support Systems Development: This funding enhances activities to support system development and demonstration prior to initial full rate production and fielding of medical simulation delivered from 0604110HP (Medical Simulation and Training, Advanced Concept Development). Materiel development may include accelerated transition of Medical Simulation products through clinical and field validation studies, advanced prototyping, risk reduction, operational test and evaluation, manufacturing, and product transition efforts for medical information technology applications and medical training systems technologies.					
FY 2022 Plans: Programs will focus on development and application of medical simulation and training capabilities for hospital care and operations. Medical Simulation Training Systems will begin to develop standardized training capabilities for point of injury, trauma simulation, hospital training, along with a common platform architecture that improves medical care across the DoD.					
FY 2023 Base Plans: FY2023 plans continue efforts as outlined in FY 2022 and support the development and demonstration of medical simulation capabilities.					
FY 2023 OOC Plans: N/A					
FY 2022 to FY 2023 Increase/Decrease Statement:					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0605145DHA / <i>Medical Products and Support Systems Development</i>	Project (Number/Name) 375A / <i>GDF - Medical Simulation and Training</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
None					
Accomplishments/Planned Programs Subtotals	0.000	2.000	2.000	0.000	2.000

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

D. Acquisition Strategy

This program will test and evaluate medical simulation products and platforms developed in order to review data for operational and clinical use prior to production and fielding.

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0605145DHA / Medical Products and Support Systems Development	Project (Number/Name) 375B / GDF - Medical Readiness
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
375B: GDF - Medical Readiness	0.000	0.000	8.536	5.725	0.000	5.725	5.674	5.967	7.490	7.641	Continuing	Continuing

Note
Starting in FY 2022, Project 375B was realigned from Project 375. This Project is not a new start.

A. Mission Description and Budget Item Justification

Guidance for Development of the Force-Medical Readiness: This funding supports material development activities that enhance system development and demonstration prior to initial full rate production and fielding of capabilities.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
<p>Title: GDF - Medical Readiness</p> <p>Description: GDF-Medical Readiness: This funding enhances activities to support system development and demonstration prior to initial full rate production and fielding of medical readiness capability delivered from 0604110HP (Medical Readiness, Advanced Concept Development). Materiel development may include accelerated transition of Medical Readiness products through clinical and field validation studies, advanced prototyping, risk reduction, operational test and evaluation, manufacturing, and product transition efforts for medical information technology applications and medical readiness systems technologies.</p> <p>FY 2022 Plans: Programs will focus on prevention of illness and injury along with optimization of human performance. Significant FY22 Programs: the Health Readiness and Performance System (HRAPS) plans to begin User Testing and Operational Assessment of its platform. Also, efforts will continue for Heat Optimization Decision Aids (HODA) program and Healthy Eating, Activity, & Lifestyle Training Headquarters (HEALTH) Decision Aid program.</p> <p>FY 2023 Base Plans: FY2023 plans continue efforts as outlined in FY 2022 and support the development and demonstration of medical readiness capabilities.</p> <p>FY 2023 OOC Plans: N/A</p> <p>FY 2022 to FY 2023 Increase/Decrease Statement:</p>	0.000	8.536	5.725	0.000	5.725

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0605145DHA / <i>Medical Products and Support Systems Development</i>	Project (Number/Name) 375B / <i>GDF - Medical Readiness</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Increase due to inflation program growth.					
Accomplishments/Planned Programs Subtotals	0.000	8.536	5.725	0.000	5.725

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

D. Acquisition Strategy

This program will test and evaluate medical products in government-managed clinical trials in order to gather data to meet military and regulatory (e.g., FDA, Environmental Protection Agency) requirements for production and fielding.

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0605145DHA / Medical Products and Support Systems Development	Project (Number/Name) 375C / GDF - Medical Combat Support
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
375C: GDF - Medical Combat Support	0.000	0.000	10.953	14.194	0.000	14.194	14.683	14.838	13.770	14.045	Continuing	Continuing

Note
Starting in FY 2022, Project 375C was realigned from Project 375. This Project is not a new start.

A. Mission Description and Budget Item Justification

Guidance for Development of the Force-Medical Combat Support: This funding supports material development activities that enhance system development and demonstration prior to initial full rate production and fielding of capabilities.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: GDF - Medical Combat Support	0.000	10.953	14.194	0.000	14.194
Description: GDF-Medical Combat Support: This funding enhances activities to support system development and demonstration prior to initial full rate production and fielding of medical readiness capability delivered from 0604110HP (Medical Combat Support, Advanced Concept Development). Materiel development may include accelerated transition of Medical Combat Support products through clinical and field validation studies, advanced prototyping, risk reduction, operational test and evaluation, manufacturing, and product transition efforts for medical information technology applications and medical combat support systems technologies.					
FY 2022 Plans: Programs will focus on the continued operational support of Expeditionary Medical Refrigeration Unit (EMRU) program plans to achieve IOC and begin the process for fielding. Also, efforts will continue for Battlefield Pain Management – Ketamine and Joint Medical Exchange & Documentation of Information for Combat Casualty Care (J-MEDIC3).					
FY 2023 Base Plans: FY2023 plans continue efforts as outlined in FY 2022 and support the development and demonstration of medical combat support capabilities.					
FY 2023 OOC Plans: N/A					
FY 2022 to FY 2023 Increase/Decrease Statement:					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0605145DHA / <i>Medical Products and Support Systems Development</i>	Project (Number/Name) 375C / <i>GDF - Medical Combat Support</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Increase due to inflation program growth.					
Accomplishments/Planned Programs Subtotals	0.000	10.953	14.194	0.000	14.194

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

D. Acquisition Strategy

This program will test and evaluate medical products in government-managed clinical trials in order to gather data to meet military and regulatory (e.g., FDA, Environmental Protection Agency) requirements for production and fielding.

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0605145DHA / Medical Products and Support Systems Development	Project (Number/Name) 375D / GDF - Medical Products and Support System Development
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
375D: GDF - Medical Products and Support System Development	0.000	0.000	0.000	42.111	0.000	42.111	36.205	35.090	38.933	39.322	Continuing	Continuing

A. Mission Description and Budget Item Justification
 Funding and mission realignment of US Army Medical Research and Development Command transfer to the Defense Health Agency in order to meet Congressional intent as outlined in NDAA 2019 (Section 711) and NDAA 2020 (Section 737) in support of Medical Products and Support System Development.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
<p>Title: GDF MPSACD Medical Products and Support System Development</p> <p>Description: Programmatic transfer in accordance with the 711/737 US Army Medical Research and Development Command transfer to Defense Health Agency in support of Medical Products and Support System Development from Army PEs 0604807A.</p> <p>FY 2022 Plans: N/A</p> <p>FY 2023 Base Plans: Programs will focus on System Development and Demonstration in support of Medical Products and Support Systems.</p> <p>FY 2023 OOC Plans: N/A</p> <p>FY 2022 to FY 2023 Increase/Decrease Statement: Funding increase for this Project was due to transfer/realignment from Army.</p>	0.000	0.000	42.111	0.000	42.111
Accomplishments/Planned Programs Subtotals	0.000	0.000	42.111	0.000	42.111
	FY 2021	FY 2022			
Congressional Add: GDF MPSACD Medical Products and Support System Development	0.000	0.000			

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022	
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0605145DHA / <i>Medical Products and Support Systems Development</i>	Project (Number/Name) 375D / <i>GDF - Medical Products and Support System Development</i>	
		FY 2021	FY 2022
<i>FY 2021 Accomplishments:</i> N/A			
<i>FY 2022 Plans:</i> N/A			
Congressional Adds Subtotals		0.000	0.000

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

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Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130: <i>Defense Health Program I BA 2: RDT&E</i>	R-1 Program Element (Number/Name) PE 0605039DHA / <i>Information Technology Development – Defense Medical Information Exchange (DMIX)</i>
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
Total Program Element	10.157	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
458A: <i>Defense Medical Information Exchange (DMIX)</i>	10.157	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

A. Mission Description and Budget Item Justification

Comprised of the infrastructure and services needed to provide seamless integrated sharing of electronic health data between the Department of Defense (DoD), Department of Veteran Affairs (VA), other Federal agencies, and private sector partners that is viewable to DoD and VA providers through a joint viewer.

DMIX program will acquire the capabilities necessary to securely and reliably exchange standardized, normalized, and correlated health data with all partners through standard data/information exchange mechanisms. This allows users in different places and different organizations to access, use, and supplement health data (technical interoperability) that has a shared meaning so users (assisted by computers) are able to make care decisions (Semantic Interoperability - Level 4). DMIX manages the data exchange capability from legacy data stores in order to prepare for the transition to the modernized Electronic Health Record platform being acquired by DoD Healthcare Management System Modernization (DHMSM). DMIX consists of a family of capability initiatives supporting the seamless exchange of standardized health data among DoD, VA, other Federal agencies, and private providers as well as benefits administrators. The DMIX program provides the capability for health care providers to access and view complete and accurate patient health records from a variety of data sources thereby allowing healthcare providers to make faster and higher quality care decisions. DMIX was established in accordance with the joint memo from Under Secretary of Defense (Comptroller) (USD(C)) and Under Secretary of Defense for Acquisition, Technology and Logistics (USD (AT&L)) titled "Joint Memorandum on Major Defense Acquisition Program and Major Automated Information System Program Resource Transparency in Department of Defense Budget Systems" dated June 27, 2013.

In addition, Joint Electronic Health Record Interoperability (JEHRI) and Virtual Lifetime Electronic Record (VLER) Health (to include Exchange) are part of the DMIX program as a direct result of the Acquisition Decision Memorandum (ADM) signed January 2, 2014 by the USD (AT&L). Use of the health data may be done via legacy systems, clinical mobile applications and system agnostic viewers such as the Joint Legacy Viewer (JLV). Customers include the Military Health System (MHS), VA, other federal agencies and over 200,000 medical care practitioners.

RDT&E will be used to manage the development of new projects and new capabilities. Examples include Pain Management Improvement, Direct Access Reporting Tool (DART), and Defense Adaptive System of Care (DASoC). We considered RDT&E funds to be more appropriate and sustainable to cover some of the projects that were previously funded via JIF or external organizations.

Program transferred to program element 0308608DHA DoD Medical Information Exchange and Interoperability (DMIX) / Enterprise Intelligence and Data Solutions (EIDS) in budget activity 08.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Defense Health Agency	Date: March 2022
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Appropriation/Budget Activity 0130: <i>Defense Health Program I BA 2: RDT&E</i>	R-1 Program Element (Number/Name) PE 0605039DHA I <i>Information Technology Development – Defense Medical Information Exchange (DMIX)</i>
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B. Program Change Summary (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Previous President's Budget	0.000	0.000	0.000	0.000	0.000
Current President's Budget	0.000	0.000	0.000	0.000	0.000
Total Adjustments	0.000	0.000	0.000	0.000	0.000
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			

Change Summary Explanation

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency										Date: March 2022		
Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0605039DHA / <i>Information Technology Development – Defense Medical Information Exchange (DMIX)</i>				Project (Number/Name) 458A / <i>Defense Medical Information Exchange (DMIX)</i>			
COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
458A: <i>Defense Medical Information Exchange (DMIX)</i>	10.157	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

A. Mission Description and Budget Item Justification

DMIX program will acquire the capabilities necessary to securely and reliably exchange standardized, normalized, and correlated health data with all partners through standard data/information exchange mechanisms. This allows users in different places and different organizations to access, use, and supplement health data (technical interoperability) that has a shared meaning so users (assisted by computers) are able to make care decisions (Semantic Interoperability – Level 4). DMIX manages the data exchange capability from legacy data stores in order to prepare for the transition to the modernized Electronic Health Record platform being acquired by DoD Healthcare Management System Modernization (DHMSM). DMIX consists of a family of capability initiatives supporting the seamless exchange of standardized health data among DoD, VA, other Federal agencies, and private providers as well as benefits administrators. The DMIX program provides the capability for health care providers to access and view complete and accurate patient health records from a variety of data sources thereby allowing healthcare providers to make faster and higher quality care decisions. DMIX was established in accordance with the joint memo from USD(C) and USD(AT&L) titled "Joint Memorandum on Major Defense Acquisition Program and Major Automated Information System Program Resource Transparency in Department of Defense Budget Systems" dated June 27, 2013.

In addition, Joint Electronic Health Record Interoperability (JEHRI) and Virtual Lifetime Electronic Record (VLER) Health (to include Exchange) are part of the DMIX program as a direct result of the Acquisition Decision Memorandum (ADM) signed January 2, 2014 by the Under Secretary of Defense for Acquisition, Technology and Logistic (USD AT&L). Use of the health data may be done via legacy systems, clinical mobile applications and system agnostic viewers such as the Joint Legacy Viewer (JLV). Customers include the MHS, VA, other federal agencies and over 200,000 medical care practitioners.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Defense Medical Information Exchange (DMIX) Program	0.000	0.000	0.000	0.000	0.000
Description: Comprised of the infrastructure and services needed to provide seamless integrated sharing of electronic health data between the DoD, VA, other Federal agencies, and private sector partners that is viewable to DoD and VA providers through a joint viewer.					
FY 2022 Plans: N/A					
FY 2023 Base Plans:					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0605039DHA / <i>Information Technology Development – Defense Medical Information Exchange (DMIX)</i>	Project (Number/Name) 458A / <i>Defense Medical Information Exchange (DMIX)</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Manage the development of new projects and new capabilities. Examples include Pain Management Improvement, DART, and DASoC. We considered RDT&E funds to be more appropriate and sustainable to cover some of the projects that were previously funded via JIF or external organizations. FY 2023 OOC Plans: N/A FY 2022 to FY 2023 Increase/Decrease Statement: Due to realignment's and adjustment's in POM23.					
Accomplishments/Planned Programs Subtotals	0.000	0.000	0.000	0.000	0.000

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

D. Acquisition Strategy

Evaluate and use the most appropriate business, technical, contract and support strategies and acquisition approach to minimize costs, reduce program risks, and remain within schedule while meeting program objectives. Strategy is revised as required as a result of periodic program reviews or major decisions.

DMIX is a collaborative effort between the DoD and VA to share Health Care Resources to improve access to, and quality and cost effectiveness of, health care as mandated by law. This investment is deeply embedded in the MHS Enterprise Roadmap as both Departments have need for modernization/ replacement of existing legacy systems. This investment will use a combination of an open architecture approach, and the purchase (in some instances) of GOTS and COTS products.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130: <i>Defense Health Program I BA 2: RDT&E</i>	R-1 Program Element (Number/Name) PE 0606105DHA I <i>Medical Program-Wide Activities</i>
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
Total Program Element	266.308	48.672	67.264	85.186	0.000	85.186	86.870	88.109	88.908	90.334	Continuing	Continuing
376B: <i>Medical Program-Wide Activity</i>	0.000	0.000	17.619	34.548	0.000	34.548	35.219	35.413	35.162	35.513	Continuing	Continuing
401A: <i>CONUS Laboratory Support Clinical Infrastructure (Army)</i>	44.304	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
432A: <i>OCONUS Laboratory Infrastructure Support (Army)</i>	90.547	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
433A: <i>NMRC Biological Defense Research Directorate (BDRD) (Navy)</i>	11.240	3.267	3.371	3.479	0.000	3.479	3.589	3.798	3.872	3.949	Continuing	Continuing
494A: <i>Medical Development (Lab Support) (Navy)</i>	120.217	45.405	46.274	47.159	0.000	47.159	48.062	48.898	49.874	50.872	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Army Medical Command receives funding for research infrastructure management support at select continental United States and outside the continental US laboratories and clinical trial sites; work is done in collaboration with DoD Military Treatment Facilities. This program element does not fund research. It funds the infrastructure support staff enabling research scientists to conduct bio-surveillance and early-to-late-stage clinical investigations into biologics, drugs, protectants, device technologies, and knowledge products. The funding provides for the sustainment of technical subject matter expertise, independent of the number of assigned projects, and the costs related to the initial outfitting and transition (IO&T) of research, development, test, and evaluation medical laboratories funded under multi-year military construction (MILCON) projects. These IO&T funds are designated as appropriations other than MILCON.

The Office of the Assistant Secretary of Defense for Health Affairs (Force Health Protection & Readiness) receives funds to provide management support for research projects at Pacific Joint Information Technology Center (P-JITC).

For the Navy Bureau of Medicine and Surgery, this program element includes facility operational funding for the Medical Biological Defense research sub-function of the Naval Medical Research Center (NMRC) Biological Defense Research Directorate (BDRD). The program mission is mandated by the Joint Requirements Office for Chemical, Biological, Radiological, and Nuclear Defense (JRO-CBRND) baseline capabilities assessment of chemical and biological passive defense. The primary function is research on countermeasures to biological threat agents, development of assays to detect biological threat agents, and bioforensic analysis of biological threat agents.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130: <i>Defense Health Program I BA 2: RDT&E</i>	R-1 Program Element (Number/Name) PE 0606105DHA I <i>Medical Program-Wide Activities</i>
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B. Program Change Summary (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Previous President's Budget	48.672	67.264	85.186	-	85.186
Current President's Budget	48.672	67.264	85.186	-	85.186
Total Adjustments	0.000	0.000	0.000	-	0.000
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			

Congressional Add Details (\$ in Millions, and Includes General Reductions)

Project: 376B: *Medical Program-Wide Activity*

Congressional Add: *GDF Medical Program-Wide Activity*

	FY 2021	FY 2022
	0.000	0.000
Congressional Add Subtotals for Project: 376B	0.000	0.000
Congressional Add Totals for all Projects	0.000	0.000

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0606105DHA / Medical Program-Wide Activities				Project (Number/Name) 376B / Medical Program-Wide Activity			
COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
376B: Medical Program-Wide Activity	0.000	0.000	17.619	34.548	0.000	34.548	35.219	35.413	35.162	35.513	Continuing	Continuing

A. Mission Description and Budget Item Justification

Funding and mission realignment of US Army Medical Research and Development Command transfer to the Defense Health Agency in order to meet Congressional intent as outlined in NDAA 2019 (Section 711) and NDAA 2020 (Section 737) in support of Medical Care Activities.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: GDF Medical Program-Wide Activity	0.000	17.619	34.548	0.000	34.548
Description: Programmatic transfer in accordance with the 711/737 US Army Medical Research and Development Command transfer to Defense Health Agency in support of Medical Care Activities from Army PEs 0603115A, 0605145A, 0605801A, 0606105A.					
FY 2022 Plans: N/A					
FY 2023 Base Plans: Efforts will focus on Management and Support of Medical Care.					
FY 2023 OOC Plans: N/A					
FY 2022 to FY 2023 Increase/Decrease Statement: Funding increase for this Project was due to transfer/realignment from Army.					
Accomplishments/Planned Programs Subtotals	0.000	17.619	34.548	0.000	34.548
	FY 2021	FY 2022			
Congressional Add: GDF Medical Program-Wide Activity	0.000	0.000			
FY 2021 Accomplishments: N/A					
FY 2022 Plans: N/A					
Congressional Adds Subtotals	0.000	0.000			

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0606105DHA / <i>Medical Program-Wide Activities</i>	Project (Number/Name) 376B / <i>Medical Program-Wide Activity</i>

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0606105DHA / Medical Program-Wide A activities	Project (Number/Name) 401A / CONUS Laboratory Support Clinical Infrastructure (Army)
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
401A: CONUS Laboratory Support Clinical Infrastructure (Army)	44.304	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

A. Mission Description and Budget Item Justification

Continental United States Laboratory Infrastructure Support funding provides infrastructure and management support for selected laboratories and research sites, enabling basic to late stage clinical investigations on medical products through collaborative efforts with the Military Health System’s (MHS) Military Treatment Facilities (MTFs). MTFs provide access to the patient populations who will benefit the most from the medical products and capabilities being developed. The funds support the retention of technical subject matter expertise, independent of the number of assigned projects. The infrastructure funds also support Institutional Review Board functions, research technical support, statistical support, grant writing assistance, and other essential functions for maintaining research in MTFs. The funds do not support research, but provide the infrastructure support enabling MTF investigators to compete for research, development, test, and evaluation (RDT&E) research funds.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: CONUS Laboratory Support Clinical Infrastructure (Army)	0.000	-	-	-	-
Description: Management support for research infrastructure at select laboratories and research sites that conduct basic to late-stage clinical research and evaluation of investigational products, such as biologics, drugs, and devices to treat/prevent polytrauma (multiple traumatic injuries), through collaborative efforts with the MHS MTFs.					
Accomplishments/Planned Programs Subtotals	0.000	-	-	-	-

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0606105DHA / Medical Program-Wide Activities				Project (Number/Name) 432A / OCONUS Laboratory Infrastructure Support (Army)			
COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
432A: OCONUS Laboratory Infrastructure Support (Army)	90.547	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Outside of the Continental United States (OCONUS) Laboratory Infrastructure Support provides management support for research infrastructure at selected overseas laboratories and research sites that conduct biosurveillance and basic to late-stage clinical research and evaluation of investigational products, such as biologics, drugs, protectants, technologies, and knowledge products to treat/prevent infectious diseases for the purpose of protecting the Warfighter; this is accomplished through collaborative efforts with the respective host nation governments. These sites are the US Army Medical Research Directorate-Kenya (USAMRD-K) in Nairobi, Kenya, the US Army Medical Research Directorate-Georgia (USAMRD-G) in Tbilisi, Georgia, and the US Army Medical Directorate-Armed Forces Research Institute of Medical Sciences (USAMD-AFRIMS) in Bangkok, Thailand. USAMRD-G is the newest laboratory, and provides support in the Caucasus region, similar to that provided by the laboratories in Kenya and Thailand to East Africa and Southeast Asia regions.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: OCONUS Laboratory Infrastructure Support (Army)	0.000	-	-	-	-
Description: Management support for research infrastructure at selected overseas laboratories and research sites is integral to support the development and testing of improved means of predicting, detecting, preventing, and treating infectious disease threats to the US military, as well as support for surveillance, training, research, and response activities for emerging infectious disease threats that could affect Service members in those regions. Supported OCONUS laboratories are the US Army Medical Directorate-Armed Forces Research Institute of Medical Sciences (AFRIMS) in Bangkok, Thailand; the US Army Research Directorate-Kenya (USAMRD-K) in Nairobi, Kenya; and the US Army Medical Research Directorate-Georgia (USAMRD-G) in Tbilisi, Georgia.					
Accomplishments/Planned Programs Subtotals	0.000	-	-	-	-

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0606105DHA / Medical Program-Wide Activities	Project (Number/Name) 433A / NMRC Biological Defense Research Directorate (BDRD) (Navy)
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
433A: NMRC Biological Defense Research Directorate (BDRD) (Navy)	11.240	3.267	3.371	3.479	0.000	3.479	3.589	3.798	3.872	3.949	Continuing	Continuing

A. Mission Description and Budget Item Justification

For the Navy Bureau of Medicine and Surgery, this program element (PE) includes funds for the Medical Biological Defense research sub-function of the Naval Medical Research Center (NMRC) Biological Defense Research Directorate (BDRD) at Fort Detrick, Maryland. Operational costs are significant by virtue of being at Fort Detrick, a highly secure National Interagency Biodefense Campus (NIBC). Uninterrupted utilities to all buildings on NIBC are provided by a Central Utility Plant (CUP) whose capacity all partners on the NIBC are required to buy into. The annual projected costs are distributed amongst the partners based on square feet and number of occupants of the building. Further, the NIBC campus is a fenced physical location with Entry Control Points (ECP). The partners on the campus, therefore, are required to pay for the guard force manning their ECP.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: NMRC Biological Defense Research Directorate (BDRD) (Navy)	3.267	3.371	3.479	-	3.479
Description: Funding for this project provides core funding for facility and security requirements in support of Biological Defense Research. The remainder of the program is sustained by the competitive acquisition of research funding.					
FY 2022 Plans: Support of the Biological Defense Research continues for Central Utility Plant, Entry Control Security Points Security Force and Operational costs necessary to achieve the mission critical functions of Biological Warfare (BW) agent detection, analysis, and deployable BW diagnostic lab service. Increase reflects pricing adjustments.					
FY 2023 Base Plans: Continued support of the Biological Defense Research for Central Utility Plant, Entry Control Security Points Security Force and Operational costs necessary to achieve the mission critical functions of Biological Warfare (BW) agent detection, analysis, and deployable BW diagnostic lab service.					
FY 2022 to FY 2023 Increase/Decrease Statement: Increase is due to inflation.					
Accomplishments/Planned Programs Subtotals	3.267	3.371	3.479	-	3.479

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0606105DHA / <i>Medical Program-Wide Activities</i>	Project (Number/Name) 433A / <i>NMRC Biological Defense Research Directorate (BDRD) (Navy)</i>

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0606105DHA / Medical Program-Wide Activities			Project (Number/Name) 494A / Medical Development (Lab Support) (Navy)				
COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
494A: Medical Development (Lab Support) (Navy)	120.217	45.405	46.274	47.159	0.000	47.159	48.062	48.898	49.874	50.872	Continuing	Continuing

A. Mission Description and Budget Item Justification

For the Navy Bureau of Medicine and Surgery, this program element (PE) includes costs related to laboratory management and support salaries of government employees that are not paid from science/research competitively awarded funding. The Outside Continental United States (OCONUS) laboratories conduct focused medical research on vaccine development for Malaria, Diarrhea Diseases, and Dengue Fever. In addition to entomology, the labs focus on Human Immunodeficiency Syndrome (HIV) studies, surveillance and outbreak response under the Global Emerging Infections Surveillance (GEIS) program, and risk assessment studies on a number of other infectious diseases that are present in the geographical regions where the laboratories are located. The Continental United States (CONUS) laboratories conduct research on Military Operational Medicine, Combat Casualty Care, Diving and Submarine Medicine, Infectious Diseases, Environmental and Occupational Health, Directed Energy, and Aviation Medicine and Human Performance.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Medical Development (Lab Support) (Navy)	45.405	46.274	47.159	-	47.159
Description: Funding in this project covers operating and miscellaneous support costs at RDT&E laboratories, including facility, equipment and civilian personnel costs that are not directly chargeable to RDT&E projects. Excluded costs include military manpower and related costs, non-RDT&E base operating costs, and military construction costs, which are included in other appropriate programs.					
FY 2022 Plans: Will support 8 medical RDT&E labs by covering operating and miscellaneous support costs at RDT&E laboratories, including facility, equipment and civilian personnel costs that are not directly chargeable to RDT&E projects.					
FY 2023 Base Plans: Continuing support of 8 medical RDT&E labs by covering operating and miscellaneous support costs including facility, equipment and civilian personnel costs that are not directly chargeable to RDT&E projects.					
FY 2022 to FY 2023 Increase/Decrease Statement: Increase is due to inflation.					
Accomplishments/Planned Programs Subtotals	45.405	46.274	47.159	-	47.159

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0606105DHA / <i>Medical Program-Wide Activities</i>	Project (Number/Name) 494A / <i>Medical Development (Lab Support) (Navy)</i>

C. Other Program Funding Summary (\$ in Millions)
N/A

Remarks

D. Acquisition Strategy
N/A

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Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130: <i>Defense Health Program I BA 2: RDT&E</i>					R-1 Program Element (Number/Name) PE 0607100DHA I <i>Medical Products and Capabilities Enhancement Activities</i>							
COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
Total Program Element	45.971	17.215	17.619	17.971	0.000	17.971	18.330	18.697	19.071	19.452	Continuing	Continuing
377A: <i>GDF-Medical Products and Capabilities Enhancement Activities</i>	45.971	17.215	17.619	17.971	0.000	17.971	18.330	18.697	19.071	19.452	Continuing	Continuing

Note

N/A

A. Mission Description and Budget Item Justification

Guidance for Development of the Force-Medical Products and Capabilities Enhancement Activities: Funds will support developmental upgrades to medical systems, training systems, and products that have been fielded, are routinely used in a fixed facility, or that have been approved for full-rate production and for which procurement funding is anticipated in the current fiscal year or subsequent fiscal years. These funds will support testing and evaluation for the enhancement of fielded or procured medical systems/products and medically-related information technology systems, assessment of fielded medical products or medical practices in order to identify the need/opportunity for changes, and analyses of clinical intervention outcomes to enhance and improve indications for pharmaceutical products. Efforts address the Military Health System Concept of Operations documents and follow-on Capabilities Based Assessments/Joint Capability Documents, appropriate Component requirements, legislative and Executive directives, and others as appropriate. Coordination occurs through the planning and execution activities of the Defense Health Agency Component Acquisition Executive (DHA CAE).

B. Program Change Summary (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Previous President's Budget	17.215	17.619	17.971	-	17.971
Current President's Budget	17.215	17.619	17.971	-	17.971
Total Adjustments	0.000	0.000	0.000	-	0.000
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	0.000			

Change Summary Explanation

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency										Date: March 2022		
Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0607100DHA / Medical Products and Capabilities Enhancement Activities				Project (Number/Name) 377A / GDF-Medical Products and Capabilities Enhancement Activities			
COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
377A: GDF-Medical Products and Capabilities Enhancement Activities	45.971	17.215	17.619	17.971	0.000	17.971	18.330	18.697	19.071	19.452	Continuing	Continuing

A. Mission Description and Budget Item Justification

Guidance for Medical Products and Capabilities Enhancement Activity: This funding supports enhancement of existing medical products and medically related information technology systems to further fielding of joint medical materiel capabilities to meet Warfighter needs through support testing and evaluation for the enhancement of fielded or procured medical systems/products and medically-related information technology systems, assessment of fielded medical products or medical practices in order to identify the need/opportunity for changes, and analyses of clinical intervention outcomes to enhance and improve indications for pharmaceutical products.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: 377A: GDF – Medical Products and Capabilities Enhancement Activities	17.215	17.619	17.971	0.000	17.971
Description: This funding provides support for developmental efforts to upgrade medical products and capabilities that have been fielded or have received approval for full rate production and anticipate production funding in the current or subsequent fiscal year. These funds will support testing and evaluation for the enhancement of fielded or procured medical systems/products and medically-related information technology systems, assessment of fielded medical products or medical practices in order to identify the need/opportunity for changes, and analyses of clinical intervention outcomes to enhance and improve indications for pharmaceutical products.					
FY 2022 Plans: Funding will be used to modernize and upgrade products through joint testing and evaluation to improve fielding of medical materiel products. Significant FY22 Programs: Continuing efforts for Medical Device Modernization & Obsolescence Management across three tiers; Adenovirus Vaccine – Modernized Production intends to award a follow-on contract to optimize vaccine manufacturing. Other efforts for enhancement include: Austere Resuscitative Care Capability; Noncompressible Hemorrhage Control (NHC); Bubble Enhanced Focused Assessment with Sonography in Trauma (BE-FAST) Project; Detecting Asynchrony and Risk of Aspiration (DARS); T&E of Submarine Rescue Systems Decompression Plan; Soldier Optimization Decision Aids (SODA) Upgrades ; Heat Optimization Decision Aids (HODA) Upgrades; Canine Thermal Monitor (CTM); Integration of					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency	Date: March 2022
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Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0607100DHA / <i>Medical Products and Capabilities Enhancement Activities</i>	Project (Number/Name) 377A / <i>GDF-Medical Products and Capabilities Enhancement Activities</i>
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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Sensor Technology into Class I Socket in Support of Advanced Prosthetics & Amputee User Interface; and Brain Hemorrhage Detector Modernization. FY 2023 Base Plans: FY 2023 plans continue efforts outlined in FY2022 and support upgrades necessary to modernize Adenovirus manufacturing obsolescence of fielded medical equipment and devices. FY 2023 OOC Plans: N/A FY 2022 to FY 2023 Increase/Decrease Statement: Pricing adjustment for inflation.					
Accomplishments/Planned Programs Subtotals	17.215	17.619	17.971	0.000	17.971

C. Other Program Funding Summary (\$ in Millions)
N/A

Remarks

D. Acquisition Strategy
This program will integrate product improvements and enhancements resulting from post marketing studies and surveillance in existing medical products and medically related information technology systems to better meet Warfighter needs.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130: <i>Defense Health Program I BA 2: RDT&E</i>	R-1 Program Element (Number/Name) PE 0605502DHA I <i>Small Business Innovative Research</i>
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
Total Program Element	63.015	71.952	96.122	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
470: <i>Small Business Innovative Research</i>	55.248	63.080	84.272	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
471: <i>Small Business Technology Transfer</i>	7.767	8.872	11.850	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Small Business Innovation Research (SBIR) program was established in the Defense Health Program (DHP), Research, Development, Test and Evaluation (RDT&E) appropriation during FY 2001, and is funded in the year of execution. The objective of the DHA SBIR Program includes stimulating technological innovation, strengthening the role of small business in meeting DoD research and development needs, fostering and encouraging participation by minority and disadvantaged persons in technological innovation, and increasing the commercial application of DoD-supported research and development results. The program funds small business proposals chosen to enhance military medical research and information technology research.

The Small Business Technology Transfer (STTR) program was established in the Defense Health Program (DHP), Research, Development, Test and Evaluation (RDT&E) appropriation during FY 2015, and is funded in the year of execution. The STTR Program, although modeled substantially on the SBIR Program, is a separate program and is separately financed. Central to the program is expansion of the public/private sector partnership to include the joint venture opportunities for small businesses and nonprofit research institutions. The unique feature of the STTR program is the requirement for the small business to formally collaborate with a research institution in Phase I and Phase II. STTR's most important role is to bridge the gap between performance of basic science and commercialization of resulting innovations. The mission of the STTR program is to support scientific excellence and technological innovation through the investment of Federal research funds in critical American priorities to build a strong national economy. The program's goals are to stimulate technological innovation, foster technology transfer through cooperative research and development between small businesses and research institutions, and increase private sector commercialization of innovations derived from federal research and development.

B. Program Change Summary (\$ in Millions)

	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023 Base</u>	<u>FY 2023 OCO</u>	<u>FY 2023 Total</u>
Previous President's Budget	71.952	96.122	0.000	0.000	0.000
Current President's Budget	71.952	96.122	0.000	0.000	0.000
Total Adjustments	0.000	0.000	0.000	0.000	0.000
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency										Date: March 2022		
Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0605502DHA / <i>Small Business Innovative Research</i>				Project (Number/Name) 470 / <i>Small Business Innovative Research</i>			
COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
470: <i>Small Business Innovative Research</i>	55.248	63.080	84.272	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Defense Health Agency (DHA) Small Business Innovation Research (SBIR) Program can participate in any of the three (FY.1, FY.2, and FY.3) Department of Defense (DoD) SBIR Broad Agency Announcements (BAA). The process begins with a call for topics to the Joint Program Committees (JPCs), multi-Service committees established to manage research, development, test and evaluation for DHA sponsored research. DHA SBIR topics are submitted directly to the US Army Medical Research and Development Command (USAMRDC) and then forwarded to the JPCs for review and internal ranking. Topic Authors brief their topics at a Topic Review Meeting attended by DHA Research & Development Directorate (J9) SBIR Program Director (PD) and personnel from the supporting USAMRDC offices. Approved DHA SBIR topics are published in DoD SBIR BAAs. Small businesses submit proposals against topics which are then evaluated by a Technical Evaluation Team (TET) made up of a Team Chief and Technical Evaluators. TETs recommend proposals for selection. All recommended proposals are reviewed by the JPCs and the DHA SBIR PD. Phase I proposal selections are announced and contract negotiations begin. Phase I contracts are awarded up to \$250K for 6 months. Follow-on Phase II projects can be awarded up to \$1.1M for 24 months. This process ensures the SBIR program addresses the multi-agency science and technology priorities.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Small Business Innovation Research (SBIR) Program	63.080	84.272	0.000	0.000	0.000
<p>Description: The program funds small business proposals chosen to enhance military medical research and information technology research. The following reflects the FY 2021 research area topics sought for proposals.</p> <p>FY 2021 Accomplishments: For FY 2021, twenty-one DHA SBIR topics were developed for the 2021.1 and 2021.3 DoD SBIR Broad Agency Announcement (BAA). Funding for each topic is based on the technical merits of the proposals submitted.</p> <p>Topics included:</p> <p>2021.1 DHA SBIR Topic DHA211-001 - Efficient Measurement of Intermediate-Level Impulse Noise and Sub-concussive Blast Exposure on Service Members in Operational Military Environments. This DHA SBIR initiative funded research to develop a personal sampling device that allows novice users to accurately measure and document intermediate-level impulse noise and sub-concussive blast exposures experienced by Service Members in realistic operational environments. This effort solicited a total of thirty seven SBIR Phase I proposals. Proposals were accepted through the 2021.1 DoD SBIR BAA pre-released in December 2020. Proposals were received in March 2021 followed by Technical Evaluation Team evaluations in April 2021. Phase I proposal selections were announced in May 2021. A total of two Phase I proposals were selected under this topic. Awards were made in July 2021.</p>					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0605502DHA / <i>Small Business Innovative Research</i>	Project (Number/Name) 470 / <i>Small Business Innovative Research</i>

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
<p>2021.1 DHA SBIR Topic DHA211-002 - Prevention Device Suitable for Exposure to Blast or Concussive Forces. This DHA SBIR initiative funded research to develop a preventive technology to reduce the risk of brain injury from blast that is relevant to operational and/or training settings. This effort solicited a total of twenty one SBIR Phase I proposals. Proposals were accepted through the 2021.1 DoD SBIR BAA pre-released in December 2020. Proposals were received in March 2021 followed by Technical Evaluation Team evaluations in April 2021. Phase I proposal selections were announced in May 2021. A total of four Phase I proposals were selected under this topic. Awards were made by August 2021.</p>					
<p>2021.1 DHA SBIR Topic DHA211-003 - Underwater Blast Lung Computational Model. This DHA SBIR initiative funded research to develop a computational model of the human lung as it responds to underwater blast insult in order to predict injury in explosive ordnance disposal (EOD) personnel exposed to underwater explosion (UNDEX). This effort solicited a total of twenty three SBIR Phase I proposals. Proposals were accepted through the 2021.1 DoD SBIR BAA pre-released in December 2020. Proposals were received in March 2021 followed by Technical Evaluation Team evaluations in April 2021. Phase I proposal selections were announced in May 2021. A total of four Phase I proposals were selected under this topic. Awards were made by August 2021.</p>					
<p>2021.1 DHA SBIR Topic DHA211-004 - Algorithm and Associated Integration Hardware for Capturing Context-sensitive Metadata for Health Risk Assessments. This DHA SBIR initiative funded research to develop a technology for automatic association of environmental conditions and activities with chemical and physical exposures based on feedback from body worn and area monitors to augment health risk assessments. This effort solicited a total of nineteen SBIR Phase I proposals. Proposals were accepted through the 2021.1 DoD SBIR BAA pre-released in December 2020. Proposals were received in March 2021 followed by Technical Evaluation Team evaluations in April 2021. Phase I proposal selections were announced in May 2021. A total of four Phase I proposals were selected under this topic. Awards were made by August 2021.</p>					
<p>2021.1 DHA SBIR Topic DHA211-005 - Wearable Radio Frequency Weapon Exposure Detector. This DHA SBIR initiative funded research to develop a low cost, low weight, small size wearable radio frequency (RF) weapon exposure detector. This effort solicited a total of forty nine SBIR Phase I proposals. Proposals were accepted through the 2021.1 DoD SBIR BAA pre-released in December 2020. Proposals were received in March 2021 followed by Technical Evaluation Team evaluations in April 2021. Phase I proposal selections were</p>					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0605502DHA / <i>Small Business Innovative Research</i>	Project (Number/Name) 470 / <i>Small Business Innovative Research</i>

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
<p>announced in May 2021. A total of seven Phase I proposals were selected under this topic. Awards were made in July and September 2021.</p> <p>2021.1 DHA SBIR Topic DHA211-006 - Portable Computerized Dynamic Posturography and Balance Training System to Deliver Sensory Organization Tests in Clinic and Field Environments. This DHA SBIR initiative funded research to develop a portable, customizable, computerized dynamic balance and measurement system that allows programmable levels of instability to deliver accurate Sensory Organization Tests in clinic, home, or field environments. This effort solicited a total of twenty seven SBIR Phase I proposals. Proposals were accepted through the 2021.1 DoD SBIR BAA pre-released in December 2020. Proposals were received in March 2021 followed by Technical Evaluation Team evaluations in April 2021. Phase I proposal selections were announced in May 2021. A total of four Phase I proposals were selected under this topic. Awards were made in July 2021.</p> <p>2021.1 DHA SBIR Topic DHA211-007 - Radioprotector Medical Countermeasure to Prevent the Effects of Acute Radiation Syndrome. This DHA SBIR initiative funded research to develop a radioprotector medical countermeasure (MCM) to the Joint Force with effective prophylactics to recover from and survive Acute Radiation Syndrome (ARS) resulting from ionizing radiation exposure. This effort solicited a total of nine SBIR Phase I proposals. Proposals were accepted through the 2021.1 DoD SBIR BAA pre-released in December 2020. Proposals were received in March 2021 followed by Technical Evaluation Team evaluations in April 2021. Phase I proposal selections were announced in May 2021. A total of three Phase I proposals were selected under this topic. Awards were made by August 2021.</p> <p>2021.1 DHA SBIR Topic DHA211-008 - Novel Antibiotic for the Treatment of Multidrug-Resistant Pseudomonas Aeruginosa Infections. This DHA SBIR initiative funded research to develop a small molecule, antibacterial drug candidate for the treatment of service members in the Military Health System infected by multidrug-resistant (MDR) Pseudomonas aeruginosa to include in vitro and in vivo efficacy in models of wounds, burns, sepsis and/or ventilator-associated pneumonia (VAP). This effort solicited a total of twenty SBIR Phase I proposals. Proposals were accepted through the 2021.1 DoD SBIR BAA pre-released in December 2020. Proposals were received in March 2021 followed by Technical Evaluation Team evaluations in April 2021. Phase I proposal selections were announced in May 2021. A total of two Phase I proposals were selected under this topic. Awards were made in June 2021.</p> <p>2021.1 DHA SBIR Topic DHA211-009 - Oxygen Generation for Deployed Army Casualty Care. This DHA SBIR initiative funded research to develop a lightweight device that generates medical grade oxygen for deployed medical facilities and personnel. This effort solicited a total of eighteen SBIR Phase I proposals. Proposals were accepted through the 2021.1 DoD SBIR BAA pre-released in December 2020. Proposals were received in</p>					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0605502DHA / <i>Small Business Innovative Research</i>	Project (Number/Name) 470 / <i>Small Business Innovative Research</i>

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
<p>March 2021 followed by Technical Evaluation Team evaluations in April 2021. Phase I proposal selections were announced in May 2021. A total of four Phase I proposals were selected under this topic. Awards were made in August 2021.</p> <p>2021.1 DHA SBIR Topic DHA211-010 - DNA-encoded Antibody Gene Transfer for HIV Immunoprophylaxis or Maintenance Therapy. This DHA SBIR initiative funded research to develop a platform for DNA-encoded monoclonal antibody delivery in large animal models of HIV infection and a prototype delivery device for use in humans. This effort solicited a total of two SBIR Phase I proposals. Proposals were accepted through the 2021.1 DoD SBIR BAA pre-released in December 2020. Proposals were received in March 2021 followed by Technical Evaluation Team evaluations in April 2021. Phase I proposal selections were announced in May 2021. A total of one Phase I proposal was selected under this topic. Award was made in July 2021.</p> <p>2021.1 DHA SBIR Topic DHA211-011 - Advanced Blood Transportation Container. This DHA SBIR initiative funded research to develop a container or container system for transporting blood to and throughout the battlefield. This effort solicited a total of twenty eight SBIR Phase I proposals. Proposals were accepted through the 2021.1 DoD SBIR BAA pre-released in December 2020. Proposals were received in March 2021 followed by Technical Evaluation Team evaluations in April 2021. Phase I proposal selections were announced in May 2021. A total of three Phase I proposals were selected under this topic. Awards were made in July 2021.</p> <p>2021.1 DHA SBIR Topic DHA211-012 - Handheld Non-Contact Laser Ultrasound Medical Scanner. This DHA SBIR initiative funded research to develop a non-contact Laser Ultrasound (ncLUS) imaging scanner in the form of a stand-alone lightweight handheld device. The acquired images are to be displayed in real-time using a handheld screen, archived and accessible for reviewing on demand in retrospective analyses. This effort solicited a total of twelve SBIR Phase I proposals. Proposals were accepted through the 2021.1 DoD SBIR BAA pre-released in December 2020. Proposals were received in March 2021 followed by Technical Evaluation Team evaluations in April 2021. Phase I proposal selections were announced in May 2021. A total of four Phase I proposals were selected under this topic. Awards were made by September 2021.</p> <p>2021.1 DHA SBIR Topic DHA211-013 - Body-Conformal Terahertz Medical Imager. This DHA SBIR initiative funded research to develop a Terahertz (THz) medical imager in the form of a small, flexible, layered rectangular blanket, with internal functional components, that can be wrapped around the torso of a wounded patient and</p>					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0605502DHA / <i>Small Business Innovative Research</i>	Project (Number/Name) 470 / <i>Small Business Innovative Research</i>

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
provide images of internal anatomy. This effort solicited a total of four SBIR Phase I proposals. Proposals were accepted through the 2021.1 DoD SBIR BAA pre-released in December 2020. Proposals were received in March 2021 followed by Technical Evaluation Team evaluations in April 2021. There were no Phase I proposals selected under this topic.					
2021.3 DHA SBIR Topic DHA213-001 - Head and Neck Protection System for Acute and Chronic Injury Mitigation. This DHA SBIR initiative will be to develop prototype systems to mitigate acute head and neck injuries due to high G loading in the ejection environment and mitigate chronic neck fatigue and pain associated with prolonged low G use of Helmet Mounted Display Systems. This effort solicited a total of twenty eight SBIR Phase I proposals. Proposals were accepted through the 2021.3 DoD SBIR BAA pre-released in August 2021. Proposals were received in October 2021 followed by Technical Evaluation Team evaluations in November 2021. Phase I proposal selections were announced in December 2021. A total of three Phase I proposals were selected under this topic. Awards will be made in March 2022.					
2021.3 DHA SBIR Topic DHA213-003 - Advanced Nasopharyngeal Airway. This DHA SBIR initiative will be to design and produce an advanced nasopharyngeal airway (NPA) that provides more effective and reliable upper airway patency in unconscious patients than existing NPAs, which can be easily inserted and removed by medics/first responders such as combat life savers with varying skill levels. This effort solicited a total of sixteen SBIR Phase I proposals. Proposals were accepted through the 2021.3 DoD SBIR BAA pre-released in August 2021. Proposals were received in October 2021 followed by Technical Evaluation Team evaluations in November 2021. Phase I proposal selections were announced in December 2021. A total of three Phase I proposals were selected under this topic. Awards will be made in March 2022.					
2021.3 DHA SBIR Topic DHA213-004 - Bougie-Integrated Endotracheal Intubation Stylet. This DHA SBIR initiative will be to design and build a bougie-integrated endotracheal intubation (ETI) stylet that improves operator first pass success rates by resolving anatomic challenges associated with indirect and direct laryngoscopy. The technology should provide enhanced ETI performance and autonomy for providers of varying skill levels operating in austere and remote environments. This effort solicited a total of nine SBIR Phase I proposals. Proposals were accepted through the 2021.3 DoD SBIR BAA pre-released in August 2021. Proposals were received in October 2021 followed by Technical Evaluation Team evaluations in November 2021. Phase I proposal selections were announced in December 2021. A total of two Phase I proposals were selected under this topic. Awards will be made in March 2022.					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0605502DHA / <i>Small Business Innovative Research</i>	Project (Number/Name) 470 / <i>Small Business Innovative Research</i>

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
<p>2021.3 DHA SBIR Topic DHA213-005 - Chemical Sterilant for Far Forward, Austere Environments. This DHA SBIR initiative will be to develop and validate a chemical sterilant solution that can sterilize surgical instruments and other materiel through immersion. Product could be a powder or concentrated liquid that when mixed with potable water, creates the requisite solution capable of the desired sterilization. This effort solicited a total of eleven SBIR Phase I proposals. Proposals were accepted through the 2021.3 DoD SBIR BAA pre-released in August 2021. Proposals were received in October 2021 followed by Technical Evaluation Team evaluations in November 2021. Phase I proposal selections were announced in December 2021. A total of one Phase I proposal was selected under this topic. Awards will be made in March 2022.</p>					
<p>2021.3 DHA SBIR Topic DHA213-006 - Sterilizer, Field, Special Materiel for Far Forward, Austere Environments. This DHA SBIR initiative will be to develop and validate a sterilization cabinet that can sterilize heat-sensitive surgical instruments and other materiel. This effort solicited a total of twenty eight SBIR Phase I proposals. Proposals were accepted through the 2021.3 DoD SBIR BAA pre-released in August 2021. Proposals were received in October 2021 followed by Technical Evaluation Team evaluations in November 2021. Phase I proposal selections were announced in December 2021. A total of three Phase I proposals were selected under this topic. Awards will be made in March 2022.</p>					
<p>2021.3 DHA SBIR Topic DHA213-007 - Anionic Nanoparticle Carriers for Neuron-targeting of Synthetic and Protein Drugs. This DHA SBIR initiative will be to construct a population of uniformly sized anionic nanoparticles (NPs) with consistent size, composition, and charge that can be loaded with traditional water-soluble synthetic drugs and, alternatively, protein therapeutics in the lumen and on the surface of the vesicles. This effort solicited a total of seventeen SBIR Phase I proposals. Proposals were accepted through the 2021.3 DoD SBIR BAA pre-released in August 2021. Proposals were received in October 2021 followed by Technical Evaluation Team evaluations in November 2021. Phase I proposal selections were announced in December 2021. A total of two Phase I proposals were selected under this topic. Awards were made in March 2022.</p>					
<p>2021.3 DHA SBIR Topic DHA213-008 - Digital Human Model for use in Simulation Environments for Tactile Human/Robot Interaction. This DHA SBIR initiative is to develop a biomechanically correct human parametric model to be used in digital simulation environments, capable of interacting with robotic manipulators in computer simulation and express stress metrics in the form of contact forces on the body and force-torques at the body joints. This effort solicited a total of nine SBIR Phase I proposals. Proposals were accepted through the 2021.3</p>					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0605502DHA / <i>Small Business Innovative Research</i>	Project (Number/Name) 470 / <i>Small Business Innovative Research</i>

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
<p>DoD SBIR BAA pre-released in August 2021. Proposals were received in October 2021 followed by Technical Evaluation Team evaluations in November 2021. Phase I proposal selections were announced in December 2021. A total of three Phase I proposals were selected under this topic. Awards will be made in March 2022.</p> <p>2021.3 DHA SBIR Topic DHA213-009 - Prolonged Care: To Demonstrate a Wearable Wound Infection Treatment Delivery Device. This DHA SBIR initiative is to reimagine the combat wound medication packet (CWMP) in a wearable format capable of delivering treatment for the prevention of infection in a prolonged care (PC) setting. The technology shall be in an easy-to-use format, durable instrumentation, lightweight, and compatible with PC. The approach should enable treatment administration for 72 hours near the wound bed. The end goal for this effort is to assemble a system of systems to prevent the development of infection in an austere environment when the provision of surgical intervention is delayed. This effort solicited a total of fifteen SBIR Phase I proposals. Proposals were accepted through the 2021.3 DoD SBIR BAA pre-released in August 2021. Proposals were received in October 2021 followed by Technical Evaluation Team evaluations in November 2021. Phase I proposal selections were announced in December 2021. A total of three Phase I proposals were selected under this topic. Awards will be made in March 2022.</p> <p>FY 2022 Plans: FY 2022 Plans: The program funds small business proposals chosen to enhance military medical research and information technology research. The following reflects the FY 2022 research area topics sought for proposals.</p> <p>FY 2022 Accomplishments/Plans: For FY 2022, nine DHA SBIR topics were developed for the 2022.1, 2022.2, and 2022.4 DoD SBIR Broad Agency Announcement (BAA). Funding for each topic is based on the technical merits of the proposals submitted.</p> <p>Topics included: 2022.1 DHA SBIR Topic DHA221-001 - Prolonged Care: To Demonstrate a Medicated Combat Tourniquet Capable of Wound Infection Treatment Delivery. This DHA SBIR initiative is to reimagine the current fielded tourniquet beyond prevention of exsanguination and demonstrate next generation designs capable of delivering treatment for the prevention of infection in a prolonged care setting. The technology must retain or improve upon the original functionality and shall be in an easy-to-use format, require minimal instrumentation, lightweight, and compatible with prolonged care. The treatment delivery approach should enable deep tissue penetration of, but not limited to, antimicrobial agents post-compression towards the wound bed. The end goal for this effort is</p>					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0605502DHA / <i>Small Business Innovative Research</i>	Project (Number/Name) 470 / <i>Small Business Innovative Research</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
<p>to assemble a system of systems to prevent the development of infection in an austere environment when the provision of surgical intervention is delayed over 72 hours (hrs). This effort solicited a total of fifteen SBIR Phase I proposals. Proposals were accepted through the 2022.1 DoD SBIR BAA pre-released in December 2021. Proposals were received in February 2022 followed by Technical Evaluation Team evaluations in March 2022. Phase I proposal selections will be announced in March 2022. A total of two Phase I proposals are anticipated to be selected under this topic. Awards will be made in June 2022.</p> <p>2022.1 DHA SBIR Topic DHA221-002 - Scalable Multi-person Hearing Protection Device Fit-testing System. This DHA SBIR initiative is to develop a system that can simultaneously fit-test multiple people with hearing protection devices (HPDs). The system should be usable in clinical and non-clinical settings to quickly test the fit of HPDs from various manufacturers. This effort solicited a total of nine SBIR Phase I proposals. Proposals were accepted through the 2022.1 DoD SBIR BAA pre-released in December 2021. Proposals were received in February 2022 followed by Technical Evaluation Team evaluations in March 2022. Phase I proposal selections will be announced in March 2022. A total of two Phase I proposals are anticipated to be selected under this topic. Awards will be made in June 2022.</p> <p>2022.1 DHA SBIR Topic DHA221-003 - Olfactory Neuroepithelium Functional Diagnostic Tool. This DHA SBIR initiative is to develop a device to determine thickness of mucus on top of the mucosa and then be able characterize important properties of the cellular layers of the olfactory cleft mucosa as has been demonstrated with optical coherence tomography (OCT) and confocal laser endomicroscopy (CLE) in the pulmonary tract¹. This would include proportion of supporting cells, fibrosis, and neuronal composition. The ability to assess olfactory neuroepithelium cellular structure enables assessment of the degree of insult from injury, leading to better treatment and improved patient outcomes. The resulting diagnostic device (medical product) will be employed at level III or IV care for diagnostic assessments after injury. This effort solicited a total of four SBIR Phase I proposals. Proposals were accepted through the 2022.1 DoD SBIR BAA pre-released in December 2021. Proposals were received in February 2022 followed by Technical Evaluation Team evaluations in March 2022. Phase I proposal selections will be announced in March 2022. A total of two Phase I proposals are anticipated to be selected under this topic. Awards will be made in June 2022.</p> <p>2022.1 DHA SBIR Topic DHA221-004 - Blind 3D Kinematic Measurement of High-Rate Complex Surface Deformation. This DHA SBIR initiative is to develop and demonstrate technologies capable of measuring complex surface response kinematics at the interface between the torso and body armor system. This effort solicited a total of eight SBIR Phase I proposals. Proposals were accepted through the 2022.1 DoD SBIR BAA</p>					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0605502DHA / <i>Small Business Innovative Research</i>	Project (Number/Name) 470 / <i>Small Business Innovative Research</i>

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
pre-released in December 2021. Proposals were received in February 2022 followed by Technical Evaluation Team evaluations in March 2022. Phase I proposal selections will be announced in March 2022. A total of two Phase I proposals are anticipated to be selected under this topic. Awards will be made in June 2022.					
2022.2 DHA SBIR Topic DHA222-001 - Developing a Hardened Portable EEG System for Aircrew Physiological Monitoring in Flight. This DHA SBIR initiative is to design, build, and demonstrate a portable, dry EEG system that is integrated into the HGU-68/P flight helmet and capable of producing reliable and interpretable data in the flight environment which presents considerable sources of noise such as electronic noise, vibration from mechanical components, acceleration forces, changes in temperature and pressure, and non- neurological signals (e.g., muscle activity). This effort will be included in the 2022.2 BAA, to be pre-released 19 April 2022. Proposals will be received in May/June 2022 followed by Technical Evaluation Team evaluations in June 2022. Phase I proposal selections will be announced in July 2022. A total of two Phase I proposals are anticipated to be selected under this topic. Awards will be made by 30 September 2022.					
2022.2 DHA SBIR Topic DHA222-002 - To Demonstrate a Technology for Early Detection and Monitoring of Wound Infections. This DHA SBIR initiative is to develop and validate a technology solution for the early detection and monitoring of wound infections in a prolonged care setting. The technology must improve upon the current ability to identify a wound infection. The end goal is to detect infections early and inform wound infection treatment as early as possible in order to ensure the most positive patient outcome. This effort will be included in the 2022.2 BAA, to be pre-released 19 April 2022. Proposals will be received in May/June 2022 followed by Technical Evaluation Team evaluations in June 2022. Phase I proposal selections will be announced in July 2022. A total of two Phase I proposals are anticipated to be selected under this topic. Awards will be made by 30 September 2022.					
2022.4 DHA SBIR Topic DHA224-D001 - Remote Frostbite Prevention System. This DHA SBIR initiative is to develop a wireless, readily-scalable, real-time skin temperature sensing system that end-users can use to identify cold stressed workers with hands, feet, and other extremities that are at risk of freezing cold injury. This effort will be included in the 2022.4 BAA, to be pre-released 10 March 2022. Proposals will be received in April 2022 followed by Technical Evaluation Team evaluations in May 2022. Phase II proposal selections will be announced in May 2022. A total of two Direct to Phase II proposals are anticipated to be selected under this topic. Awards will be made by 31 August 2022.					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0605502DHA / <i>Small Business Innovative Research</i>	Project (Number/Name) 470 / <i>Small Business Innovative Research</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
<p>2022.4 DHA SBIR Topic DHA224-D002 - Therapeutic Modalities for the Mitigation of Neck/Back Pain during Flight Operations. This DHA SBIR initiative is to design, build, and demonstrate a portable, ergonomically appropriate, and powered device for the relief of neck/back pain during long-haul flight operations. The proposed device shall: 1) not employ lithium-ion batteries in conjunction with the enriched oxygen environment of the aircraft cockpit/cabin; 2) provide relief on-demand as needed via on/off switch; 3) require no manipulation on the part of the aircrew outside turning on or off; 4) be compatible for use across all current-generation flight seats independent of platform type (fixed-wing ejection seat (FWES), fixed-wing non-ejection seat (FWNES), or rotary-wing/tilt rotor (RW/TR) and aircrew position (cockpit vs cabin); and finally, 5) not interfere with the operation of flight, safety, and life-support gear. Additionally, the proposed device may: 1) provide heat at targeted areas; 2) be obtainable without a prescription. This effort will be included in the 2022.4 BAA, to be pre-released 10 March 2022. Proposals will be received in April 2022 followed by Technical Evaluation Team evaluations in May 2022. Phase II proposal selections will be announced in May 2022. A total of two Direct to Phase II proposals are anticipated to be selected under this topic. Awards will be made by 31 August 2022.</p>					
<p>2022.4 DHA SBIR Topic DHA224-D003 - Adaptive Technology to Optimize Rehabilitation of Lower Extremity Musculoskeletal Injuries throughout Recovery. This DHA SBIR initiative is to develop a technology (e.g. brace, exoskeleton) that adapts to facilitate recovery throughout rehabilitation of service members with lower extremity musculoskeletal injury to enable return to duty throughout rehabilitation of service members with lower extremity musculoskeletal injury to enable return to duty. This effort will be included in the 2022.4 BAA, to be pre-released 10 March 2022. Proposals will be received in April 2022 followed by Technical Evaluation Team evaluations in May 2022. Phase II proposal selections will be announced in May 2022. A total of two Direct to Phase II proposals are anticipated to be selected under this topic. Awards will be made by 31 August 2022.</p> <p>FY 2023 Base Plans: FY 2023 Plans: No funding programmed. The DHA SBIR program is funded in the year of execution.</p> <p>FY 2023 OCO Plans: FY 2023 Plans: No funding programmed. The DHA SBIR program is funded in the year of execution.</p> <p>FY 2022 to FY 2023 Increase/Decrease Statement: No funding programmed. The DHA SBIR program is funded in the year of execution.</p>					
Accomplishments/Planned Programs Subtotals	63.080	84.272	0.000	0.000	0.000

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0605502DHA / <i>Small Business Innovative Research</i>	Project (Number/Name) 470 / <i>Small Business Innovative Research</i>

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

D. Acquisition Strategy

Test and evaluate commercially developed prototypes funded by the SBIR program to ensure military and regulatory requirements are met prior to production and fielding, to include FDA licensure and Environmental Protection Agency registration.

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0605502DHA / <i>Small Business Innovative Research</i>				Project (Number/Name) 471 / <i>Small Business Technology Transfer</i>			
COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
<i>471: Small Business Technology Transfer</i>	7.767	8.872	11.850	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

A. Mission Description and Budget Item Justification

Small Business Technology Transfer (STTR) is a program that expands funding opportunities in the federal innovation research and development arena. Central to the program is expansion of the public/private sector partnership to include the joint venture opportunities for small businesses and nonprofit research institutions. The unique feature of the STTR program is the requirement for the small business to formally collaborate with a research institution in Phase I and Phase II. STTR's most important role is to bridge the gap between performance of basic science and commercialization of resulting innovations. The program funds small business proposals that partner with a research institution, are technically meritorious, and enhance Joint Program Committee (JPC) research and development efforts. The DHA STTR Program can participate in any of the three (FY.A, FY.B, and FY.C) Department of Defense (DoD) STTR BAAs. The process begins with a call for topics to the JPCs. DHA STTR topics are submitted directly to US Army Medical Research and Development Command (USAMRDC) and then forwarded to the JPCs for review and internal ranking. Topic Authors brief their topics at a Topic Review Meeting attended by the DHA Research & Development Directorate (J9) STTR Program Director (PD) and personnel from the supporting USAMRDC offices. Approved DHA STTR topics are published in the DoD STTR BAA. Small businesses submit proposals against topics which are then evaluated by a Technical Evaluation Team (TET) made up of a Team Chief and Technical Evaluators. TETs recommend proposals for selection. All recommended proposals are reviewed by the JPCs and the DHA STTR PD. Phase I proposal selections are announced and contract negotiations begin. Phase I contracts are awarded up to \$250K for 6 months. Follow-on Phase II projects can be awarded up to \$1.1M for 24 months. This process ensures the STTR program addresses the multi-agency science and technology priorities.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Small Business Technology Transfer (STTR) Program	8.872	11.850	0.000	0.000	0.000
<p>Description: STTR Program offers funding opportunities in federal research and development to small businesses. The program aims to stimulate technological innovation in DoD research and development, strengthen the role of small business in meeting DoD research and development needs, foster and encourage participation by minority and disadvantaged persons in technological innovation, and increase the commercial application of DoD-supported research or research and development results. The following reflects the FY 2021 research area topics sought for proposals.</p> <p>FY 2021 Accomplishments: For FY 2021, three DHA STTR topics were developed for the 2021.C DoD STTR Broad Agency Announcement (BAA). Funding for each topic is based on the technical merits of the proposals submitted. Topics included:</p>					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0605502DHA / <i>Small Business Innovative Research</i>	Project (Number/Name) 471 / <i>Small Business Technology Transfer</i>

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
<p>2021.C DHA STTR Topic DHA21C-001 - Dissolvable Materials for Photochemical Tissue Bonding. This DHA STTR initiative funded research to develop material compositions which dissolve in blood in times from ten minutes to one hour, which are compatible for use in the body, which can be shaped as needed, and which can be produced in commercial quantities at reasonable cost. This effort solicited a total of nine STTR Phase I proposals. Proposals were accepted through the 2021.C DoD STTR BAA pre-released in August 2021. Proposals were received in October 2021 followed by Technical Evaluation Team evaluations in November 2021. Phase I proposal selections were announced in December 2021. A total of two Phase I proposals were selected under this topic. Awards will be made in March 2022.</p>					
<p>2021.C DHA STTR Topic DHA21C-002 - Rapid Purification for Therapeutic Use of Bacteriophages That Target Gram-Negative Bacterial Species. This DHA STTR initiative funded research to develop and demonstrate a technology to rapidly purify bacteriophages (phages) of Gram-negative bacteria to a level suitable for human therapeutic use, free of endotoxin and of other bacterial remnants including other pyrogens and pathogen-associated molecular patterns (PAMPS), for application in treating recalcitrant multidrug resistant infections of the Warfighter. This effort solicited a total of two STTR Phase I proposals. Proposals were accepted through the 2021.C DoD STTR BAA pre-released in August 2021. Proposals were received in October 2021 followed by Technical Evaluation Team evaluations in November 2021. Phase I proposal selections were announced in December 2021. A total of one Phase I proposal was selected under this topic. Award was made in March 2022.</p>					
<p>2021.C DHA SBIR Topic DHA21C-003 - Material Solutions to Bacteriophage Stabilization and Application in Austere Environments. This DHA STTR initiative funded research to develop technology that stabilize bacteriophage (phage) cocktails for long-term storage and use in austere environments. The proposed material solution would aid in improving effectiveness of phage therapy, and ease of use by ensuring long-term stability of phage at a range of temperatures (-20 to 45oC). Phage spray drying, packaging in nanoparticle, hydrogel polymer matrix, or a combination thereof, or other relevant technologies will be considered. This effort solicited a total of three STTR Phase I proposals. Proposals were accepted through the 2021.C DoD STTR BAA pre-released in August 2021. Proposals were received in October 2021 followed by Technical Evaluation Team evaluations in November 2021. Phase I proposal selections were announced in December 2021. A total of two Phase I proposals were selected under this topic. Awards will be made in March 2022.</p>					
<p>FY 2022 Plans: The following reflects the FY 2022 research area topics sought for proposals.</p>					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0605502DHA / <i>Small Business Innovative Research</i>	Project (Number/Name) 471 / <i>Small Business Technology Transfer</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
<p>FY 2022 Accomplishments/Plans: For FY 2022, one DHA STTR topic was developed for the 2022.B DoD STTR Broad Agency Announcement (BAA). Funding for each topic is based on the technical merits of the proposals submitted. Topics included:</p> <p>2022.B DHA SBIR Topic DHA22B-001 - Integrated Blast Acquisition Test Surrogate. This DHA STTR initiative is to develop an anatomically accurate low cost blast surrogate to test and evaluate current and next-generation personal protective equipment (PPE). This effort will be included in the 2022.B BAA, to be pre-released 19 April 2022. Proposals will be received in May/June 2022 followed by Technical Evaluation Team evaluations in June 2022. Phase I proposal selections will be announced in July 2022. A total of two Phase I proposals are anticipated to be selected under this topic. Awards will be made by 30 September 2022.</p> <p>FY 2023 Base Plans: No funding programmed. The DHA STTR program is funded in the year of execution.</p> <p>FY 2023 OOC Plans: No funding programmed. The DHA STTR program is funded in the year of execution.</p> <p>FY 2022 to FY 2023 Increase/Decrease Statement: No funding programmed. The DHA STTR program is funded in the year of execution.</p>					
Accomplishments/Planned Programs Subtotals	8.872	11.850	0.000	0.000	0.000

C. Other Program Funding Summary (\$ in Millions) N/A
Remarks N/A
D. Acquisition Strategy Test and evaluate commercially developed prototypes funded by the STTR program to ensure military and regulatory requirements are met prior to production and fielding, to include FDA licensure and Environmental Protection Agency registration.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130: <i>Defense Health Program I BA 8: Software and Digital Technology Pilot Programs</i>	R-1 Program Element (Number/Name) PE 0308604DHA / <i>DoD Medical Information Exchange and Interoperability (DMIX) / Enterprise Intelligence and Data Solutions (EIDS)</i>
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
Total Program Element	0.000	0.000	0.000	137.356	0.000	137.356	136.357	144.545	111.305	124.018	Continuing	Continuing
864: <i>DoD Medical Information Exchange and Interoperability (DMIX) / Enterprise Intelligence and Data Solutions (EIDS)</i>	-	0.000	0.000	137.356	-	137.356	136.357	144.545	111.305	124.018	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Defense Health Agency requires a fully rationalized, affordable, and modernized Military Health System Information Platform (MIP) program under the directorate and ownership of Enterprise Intelligence and Data Solutions Program Management Office (EIDS).

EIDS mission is to provide a comprehensive solution capable of supporting the evolving clinical and business data needs within DHA, spanning across DHHQ, clinical markets, Military Treatment Facilities, research communities, managed support contractors, combatant commands, and Health Information Exchange partners including Veterans Affairs (VA) and other Federal entities. To achieve better clinical outcomes, EIDS must transform into a Highly Reliable Organization (HRO). To serve as an effective HRO, EIDS must be a learning organization by using analytics and metrics to define and grow from lessons learned. Effective data analytics require data maturity goals and unwavering stakeholder support of the way forward.

DMIX Purpose: Comprised of infrastructure and services needed to provide seamless integrated sharing of electronic health data between the Department of Defense (DoD), Veteran’s Affairs (VA), other Federal agencies, and private sector partners viewable to DoD and VA providers.

DMIX/EIDS FY 2023 BA08: Continue sustainment and maintenance of EIDS including program management, configuration management, technical refresh, commercial software licenses, data maintenance, ad hoc report maintenance, product/help desk support, cybersecurity compliance, software maintenance, test and evaluation activities, and cost of operating site personnel.

Increase activities consistent with best practices for Data Management and Data Architecture in order to reduce costs and enhance productivity. Establish innovative center of excellence for configuration management, requirements management, and version control of data, source code, and procedural instructions. Adhere to a path to Software Engineering Institute (SEI) Capability Maturity Model (CMM) level 4 or 5 compliance, again with the focus on reducing cost and increasing productivity.

Funding will be used for continued development and sustainment activities for seamless integrated sharing of electronic health data between the Department of Defense (DoD), the Department of Veterans Affairs (VA), other Federal agencies, and private sector partners viewable to DoD and VA providers.

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity	R-1 Program Element (Number/Name)
0130: <i>Defense Health Program I BA 8: Software and Digital Technology Pilot Programs</i>	PE 0308604DHA / <i>DoD Medical Information Exchange and Interoperability (DMIX) / Enterprise Intelligence and Data Solutions (EIDS)</i>

B. Program Change Summary (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Previous President's Budget	0.000	0.000	137.356	-	137.356
Current President's Budget	0.000	0.000	137.356	-	137.356
Total Adjustments	0.000	0.000	0.000	-	0.000
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			

Congressional Add Details (\$ in Millions, and Includes General Reductions)

Project: 864: *DoD Medical Information Exchange and Interoperability (DMIX) / Enterprise Intelligence and Data Solutions (EIDS)*

	FY 2021	FY 2022
Congressional Add: <i>Defense Medical Information Exchange and Interoperability (DMIX) / Enterprise Intelligence and Data Solutions (EIDS)</i>	0.000	0.000
Congressional Add Subtotals for Project: 864	0.000	0.000
Congressional Add Totals for all Projects	0.000	0.000

Change Summary Explanation

Invited to participate in Test Pilot Program that subsequently changed FYD23 through the next 5 years (FY23-FY27)

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130 / 8	R-1 Program Element (Number/Name) PE 0308604DHA / DoD Medical Information Exchange and Interoperability (DMIX) / Enterprise Intelligence and Data Solutions (EIDS)	Project (Number/Name) 864 / DoD Medical Information Exchange and Interoperability (DMIX) / Enterprise Intelligence and Data Solutions (EIDS)
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
864: DoD Medical Information Exchange and Interoperability (DMIX) / Enterprise Intelligence and Data Solutions (EIDS)	-	0.000	0.000	137.356	-	137.356	136.357	144.545	111.305	124.018	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

- EIDS will be spending FY23 allocations on development and sustainment of data sources for the Defense Health Agency. Enterprise Intelligence & Data Solutions Program Management Office supports MHS strategic goals and facilitate informed decision-making through the delivery of robust information services and data in a timely, relevant, and actionable manner. The EIDS PMO strives to execute the DHA Data Vision of providing seamless data services and decision support for clinicians, patients, beneficiaries, analysts, researchers, and DoD leadership to improve patient care.
- The PMO manages a vast array of data-related assets, including data warehouses, data virtualization tools, visualization solutions (e.g. CarePoint) and data exchange solutions that in combination makes up a system of systems - Military Health System Information Platform (MIP).
- Delivering, connecting, and curating data to facilitate informed decision-making across a diverse data ecosystem in support of Military Health, Readiness, Federal Health Data Integration and Innovation.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Defense Medical Information Exchange and Interoperability (DMIX) / Enterprise Intelligence and Data Solutions (EIDS)	0.000	0.000	137.356	0.000	137.356
Description: <ul style="list-style-type: none"> • EIDS will be spending FY23 allocations on development and sustainment of data sources for the Defense Health Agency. Enterprise Intelligence & Data Solutions Program Management Office supports MHS strategic goals and facilitate informed decision-making through the delivery of robust information services and data in a timely, relevant, and actionable manner. The EIDS PMO strives to execute the DHA Data Vision of providing seamless data services and decision support for clinicians, patients, beneficiaries, analysts, researchers, and DoD leadership to improve patient care. • The PMO manages a vast array of data-related assets, including data warehouses, data virtualization tools, visualization solutions (e.g. CarePoint) and data exchange solutions that in combination makes up a system of systems - Military Health System Information Platform (MIP). 					

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 8	R-1 Program Element (Number/Name) PE 0308604DHA / DoD Medical Information Exchange and Interoperability (DMIX) / Enterprise Intelligence and Data Solutions (EIDS)	Project (Number/Name) 864 / DoD Medical Information Exchange and Interoperability (DMIX) / Enterprise Intelligence and Data Solutions (EIDS)

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
<p>• Delivering, connecting, and curating data to facilitate informed decision-making across a diverse data ecosystem in support of Military Health, Readiness, Federal Health Data Integration and Innovation.</p> <p>FY 2022 Plans: N/A</p> <p>FY 2023 Base Plans: FY 2023 Plans:</p> <ul style="list-style-type: none"> • Realign to support Product and Portfolio management structure to accomplish EIDS mission, implement new DevSecOps approach with project management trainings and supporting documentation • Work in tandem with EIDS PM to define DHA Data Strategy for primary and secondary systems as well as both clinical and non-clinical systems Develop product roadmap with Health Informatics, LPDH, HealthIntent/Registries/Care, JOMIS and DHMSM • Collaboration with DHMSM, HI, JOMIS, and DMIX components to develop integrated view of the key milestones • Coordinate and align with JOMIS on secondary data stores and analytics to ensure duplication of effort does not occur • Determine EIDS products to assign Data Solution Owners with CHIO • Release and integrate Digital Service Catalog on CarePoint for all users • Formalize and standardize requirements process including Service Now (GSC) and MHS Requirements Submission Portal (MHSRSP) and ensure end-user communication and coordination • MIP-Immunization Tracking and Reporting project completion and DEERSi rationalization • LDCS continues to rationalize and decommission legacy systems, adding CDR to scope • Operation Helios - Execute M2/MDR rationalization, migration and modernization into the MIP • DMSS rationalization / biosurveillance platform integration • Develop MIP Minute Awareness Campaign • Receive way forward from HI on that requirements for what data needs to go into the longitudinal record from legacy data • Identification of bidirectional feeds between MHS GENESIS and MIP (exploring BDE 3.0 and HIDUU) • Data Mapping Project and MIP/HealthIntent data standardization 					

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** March 2022

Appropriation/Budget Activity 0130 / 8	R-1 Program Element (Number/Name) PE 0308604DHA / DoD Medical Information Exchange and Interoperability (DMIX) / Enterprise Intelligence and Data Solutions (EIDS)	Project (Number/Name) 864 / DoD Medical Information Exchange and Interoperability (DMIX) / Enterprise Intelligence and Data Solutions (EIDS)
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B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
<ul style="list-style-type: none"> • Complete RDT&E Operation Fast Forward projects (SDK, Data Quality/BDE 3.0, MLaaS, MD Clone, De-identified and Synthetic data, VDE, CICD) Continue to foster growth and inclusion in our organization to empower our people • DES integration and collaboration with ACS-DAL technical team for analysis in developing a future state and associated COA • Enabled Joint Health Information Exchange Simplified XML within DES • LDCS / DES FHIR interface • DMIX Release 10, Patch 1 (DES to query MHS GENESIS FHIR API service to retrieve Allergy, Procedures, Problem List, Inpatient and Outpatient Medication) • CHDR NextGen completion <p>FY 2023 OOC Plans: N/A</p> <p>FY 2022 to FY 2023 Increase/Decrease Statement: inflationary adjustment</p>					
Accomplishments/Planned Programs Subtotals	0.000	0.000	137.356	0.000	137.356

	FY 2021	FY 2022
<p>Congressional Add: Defense Medical Information Exchange and Interoperability (DMIX) / Enterprise Intelligence and Data Solutions (EIDS)</p> <p>FY 2021 Accomplishments: N/A</p> <p>FY 2022 Plans: N/A</p>	0.000	0.000
Congressional Adds Subtotals	0.000	0.000

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks
N/A

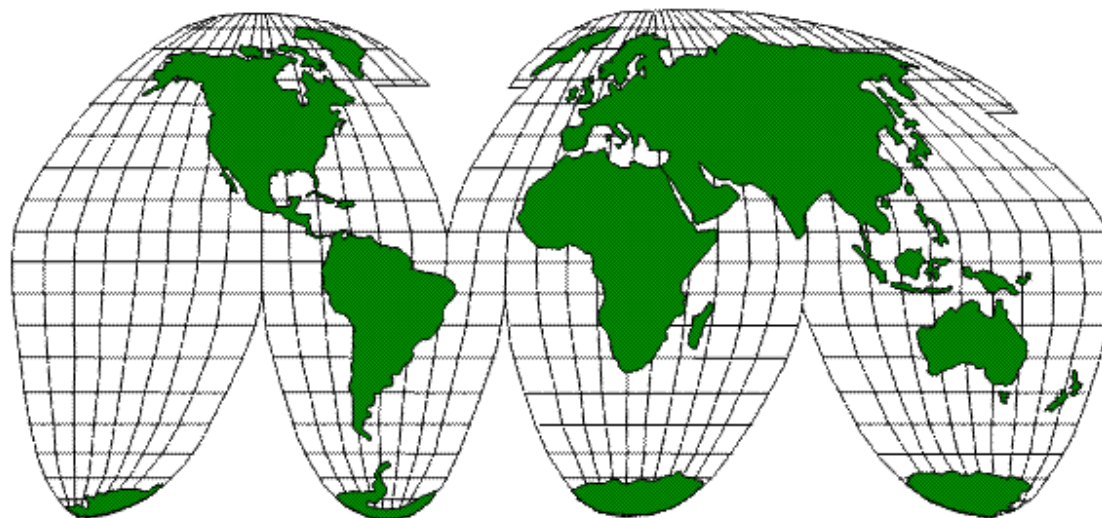
UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency		Date: March 2022
Appropriation/Budget Activity 0130 / 8	R-1 Program Element (Number/Name) PE 0308604DHA / <i>DoD Medical Information Exchange and Interoperability (DMIX) / Enterprise Intelligence and Data Solutions (EIDS)</i>	Project (Number/Name) 864 / <i>DoD Medical Information Exchange and Interoperability (DMIX) / Enterprise Intelligence and Data Solutions (EIDS)</i>

D. Acquisition Strategy

Evaluate and use the most appropriate business, technical, contract and support strategies and acquisition approach to minimize costs, reduce program risks, and remain within schedule while meeting program objectives. Strategy is revised as required as a result of periodic program reviews or major decisions. PEO DHMS is an acquisition organization, reporting to the Under Secretary of Defense for Acquisition and Sustainment.

DEFENSE HEALTH PROGRAM



**CLEARED
For Open Publication**

Apr 07, 2022

Fiscal Year (FY) 2023 President's Budget

OVERSEAS OPERATION COSTS APPENDIX

Department of Defense
OFFICE OF PREPUBLICATION AND SECURITY REVIEW

April 2022

The Defense Health Program spans the globe in support of the Department of Defense's most important resource--active and retired military members and their families.

Preparation of the Defense-Wide budget excluding revolving funds, cost the Department of Defense a total of approximately \$1,148,520 in FY 2022

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**Defense Health Program
Overseas Operations Costs
Fiscal Year (FY) 2023 President's Budget**

<u>Sub-Activity Group</u>	<u>Sub-Activity Group Name</u>	<u>FY 2021 Actuals</u>	<u>FY 2022 Enacted</u>	<u>FY 2023 Request</u>
1	In House Care	55,977	63,200	28,235
2	Private Sector Care	296,828	188,126	7,108
3	Consolidated Health Support	1,517	525	1,076
4	Information Management			
5	Management Activities			
6	Education and Training			
7	Base Operations/Communications			
		354,322	251,851	36,419

Fiscal Year (FY) 2023 Overseas Operations Costs funding accounted for in the Base budget include:
 Combat or direct combat support expenses that discontinue once combat operations end at major contingency locations (\$36,419K)

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**Defense Health Program
Overseas Operations Costs
Fiscal Year (FY) 2023 President's Budget**

<u>Line</u>	<u>(Dollars in Thousands)</u>	<u>FY 2021</u>	<u>CHANGE</u>		<u>FY 2022</u>	<u>CHANGE</u>		<u>FY 2023</u>	
			<u>Price</u>	<u>Program</u>		<u>Price</u>	<u>Program</u>		
		<u>Actuals</u>	<u>Growth</u>	<u>Growth</u>	<u>Enacted</u>	<u>Growth</u>	<u>Growth</u>	<u>Request</u>	
101	Exec, Gen'l & Spec Scheds	19	0	(19)	-				
199	Total Civ Compensation	19	0	(19)	-				
308	Travel of Persons	9	0	1,886	1,895	59	(1,302)	652	
399	Total Travel	9	0	1,886	1,895	59	(1,302)	652	
411	Army Supply	-	-	500	500	41	(41)	500	
417	Local Purch Supplies & Mat	-	-	-	-	-	-	-	
499	Total Supplies & Materials	-	-	500	500	41	(41)	500	
502	Army Fund Equipment	-	-	750	750	15	(15)	750	
599	Total DWCF Equipment Purchases	-	-	750	750	15	(15)	750	
601	Army Industrial Operations	-	-	-	-	-	-	-	
682	Industrial Mobilization Capacity	-	-	-	-	-	-	-	
699	Total Other Fund Purchases	-	-	-	-	-	-	-	
706	AMC Channel Passenger	-	-	-	-	-	42	42	
771	Commercial Transportation	-	-	-	-	-	-	-	
799	Total Transportation	-	-	-	-	-	42	42	
914	Purchased Communications (Non-Fund)	-	-	-	-	-	-	-	
915	Rents (Non-GSA)	-	-	-	-	-	-	-	
920	Supplies & Materials (Non-Fund)	4,074	159	(4,188)	45	2	(47)	-	
922	Equipment Maintenance by Contract	29	1	(30)	-	-	-	-	
924	Pharmaceutical Drugs	43,774	1,707	(16,949)	28,532	1,113	(22,965)	6,680	
925	Equipment Purchases (Non-Fund)	32	1	(33)	-	-	-	-	
955	Other Costs (Medical Care)	608	24	(632)	-	-	78	78	
984	Equipment Contracts	-	-	-	-	-	-	-	
986	Medical Care Contracts	305,777	11,925	(97,573)	220,129	8,585	(200,997)	27,717	
999	Total Other Purchases	354,294	13,817	(119,405)	248,706	9,700	(223,931)	34,475	
9999	Total	354,322	-	13,818	(116,289)	251,851	9,814	(225,246)	36,419

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**Defense Health Program
Overseas Operations Costs
Fiscal Year (FY) 2023 President's Budget**

Budget Activity 1, Operation and Maintenance

I. Description of Operations Supported: Provides resources needed to fund the incremental (above baseline) costs to support Operation ENDURING SENTINEL. The resource amounts provided are consistent with the Department's force level budgetary assumptions. These incremental funds provide medical and dental services to active forces, mobilized Reserve Components (RC), and their family members in support of these operations. The Defense Health Program (DHP) baseline budget request does not fund the medical and dental support requirements within the Area of Responsibility (AOR). Other DHP operational requirements in support of these operations include: Pre/Post deployment processing for personnel, aeromedical transportation of casualties from Germany to the U.S., and contracted civilian medical personnel to backfill deployed permanent Military Medical Treatment Facility (MTF) staff.

The Defense Health Program's FY 2022 Direct War costs are included in the Base Request.

Overseas Operations Costs (\$36,419K): Overseas Operations Costs are those combat or direct combat support costs that will not continue to be expended once combat operations end at major contingency locations.

- **In House Care:**
 - Incremental costs for casualties above the baseline budget
 - Backfill of deployed permanent medical personnel
- **Private Sector Care**
 - Incremental costs to provide medical/dental care for mobilized RC and their family members
- **Consolidated Health Support**
 - Incremental costs for aeromedical transportation of wounded warriors from outside the theater of operations to the United States
 - Backfill of medical staff in Military Public/Occupational Health to continue MTF and base support functions

**Defense Health Program
Overseas Operations Costs
Fiscal Year (FY) 2023 President's Budget**

II. Financial Summary:

	(\$ in Thousands)		
Total DHP OOC:	FY 2021	FY 2022	FY 2023
	<u>Actuals</u>	<u>Enacted</u>	<u>Request</u>
	354,322	251,851	36,419
	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>
Overseas Operations Costs:	354,322	251,851	36,419

A. Subactivity Group – In-House Care:

	(\$ in Thousands)		
	FY 2021	FY 2022	FY 2023
	<u>Actuals</u>	<u>Enacted</u>	<u>Request</u>
	55,977	63,200	28,235

Narrative Justification: Funding directly supports pre/post deployment activities such as medical records reviews, hearing and vision exams, medical evaluations, immunizations and behavioral health screening for all deploying and returning soldiers. Funding also supports backfill of deployed personnel with medical staff such as providers, nurses, and medical technicians to sustain the delivery of patient care in Military Medical Treatment Facilities (MTFs). Decrease from FY 2022 to FY 2023 is based on decrease in forecasted deployments.

Impact if not funded: The Military Medical Treatment Facilities' (MTFs)' primary mission is to provide healthcare to uniformed service personnel. Funding is required to provide medical and dental care for the mobilized forces not funded in the baseline budget. Without this funding, MTFs would have to reduce access to care for non-active duty beneficiaries (retirees and family members) resulting in disengagement of these beneficiaries to the private sector for healthcare services. If funding is not provided to backfill the healthcare positions vacated in the MTFs by deployed medical personnel, components will have to redirect funding from other direct care system requirements to sustain the continuity of healthcare to patients.

**Defense Health Program
Overseas Operations Costs
Fiscal Year (FY) 2023 President's Budget**

B. Subactivity Group – Private Sector Care:

FY 2021	FY 2022	FY 2023
<u>Actuals</u>	<u>Enacted</u>	<u>Request</u>
296,828	188,126	7,108

Narrative Justification: Funding provides Reserve Component (RC) personnel and their family members with healthcare, pharmacy and dental benefits. Mobilized RC personnel and their family members are eligible for medical and dental similar to active duty personnel, including access to private sector care providers through the TRICARE Managed Care Support Contract (MCSC) provider networks. This access to MCSC provider networks also supports those beneficiaries living in remote locations outside the established network areas. TRICARE Reserve Select program, offered to RC members who enroll and share premiums with the government, is not included in this requirement. Decrease from FY 2022 to FY 2023 is based on decrease in forecasted deployments.

Impact if not funded: Providing healthcare to mobilized Reserve Component personnel and their families is congressionally mandated. This is a must-pay bill and the cost will be incurred regardless of the availability of funding. If funding is not provided, lower priority healthcare requirements will be delayed so that funding can be shifted to pay for the healthcare services.

C. Subactivity Group - Consolidated Health Support:

FY 2021	FY 2022	FY 2023
<u>Actuals</u>	<u>Enacted</u>	<u>Request</u>
1,517	525	1,076

Narrative Justification: The FY23 request is necessary to resource inpatient movement expenses by transporting wounded warriors and patients from outside the theater of operations (Germany) to the United States. In addition, other requirements within Consolidated Health Support include the medical backfill of personnel in the Military Public/Occupational Health to continue MTF and base support operations. Increase from FY 2022 to FY 2023 is based on increase in requirements within Consolidated Health Support including medical backfill personnel.

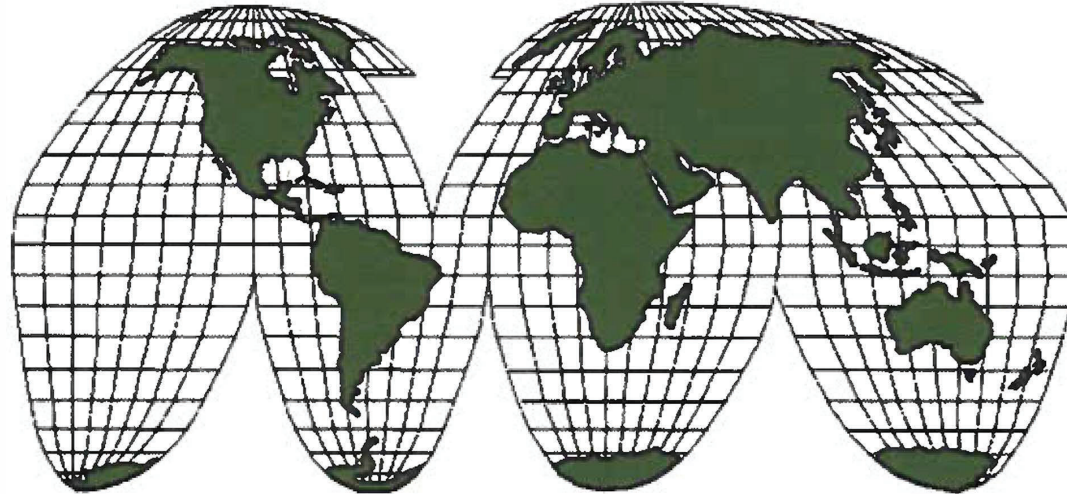
Impact if not funded: MTFs will use existing Consolidated Health Support baseline funding for the aeromedical transportation of wounded warriors at the expense of other Military Public/Occupational Health requirements within Consolidated Health Support.

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For Open Publication**

Apr 13, 2022

Department of Defense
OFFICE OF PREPUBLICATION AND SECURITY REVIEW

DEFENSE HEALTH PROGRAM



Fiscal Year (FY) 2023 President's Budget

OPERATION AND MAINTENANCE
PROCUREMENT

RESEARCH, DEVELOPMENT, TEST AND EVALUATION

Volume 4: Services Medical Readiness Exhibits Activities

April 2022

The Defense Health Program spans the globe in support of the Department of Defense's most important resource--active and retired military members and their families.

**Preparation of the Defense-Wide budget
excluding revolving funds, cost the
Department of Defense a total of
approximately \$1,126,000 in FY 2021**

**Defense Health Program
Fiscal Year (FY) FY 2023 Budget Estimates**

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Army
Medical Readiness Activities
Fiscal Year (FY) 2023 President's Budget

Description of Operations Financed:

MEDICAL READINESS: provides manpower and operational support to Medical organizations and capabilities to include education and training opportunities for health care professionals, medical logistic support, basic municipal services to operate facilities, medical research, and acquisition of capital equipment.

MEDICAL OPERATIONS SUPPORT: provides resources for (1) integrated, automated medical information addressing the functional areas including service members' entry exams, medical logistics, medical threat/intelligence, food protection/ veterinary, and optical fabrication; (2) Medical Operation Data System (MODS), medical readiness information management; and (3) manpower for Office of Soldier Council and information requirements.

MEDICAL RESEARCH AND DEVELOPMENT: provides resources to the U.S. Army Aeromedical Research Laboratory (USAARL) and the U.S. Army Medical Research Institute of Environmental Medicine (USARIEM) to resource efforts related to medical readiness research programs.

MEDICAL INSTALLATION SUPPORT: Provides resources for engineering services, security functions, and pre-hospital emergency medical services.

MEDICAL ACQUISITION SUPPORT: provides resources to the US Army Health Contracting Activity (USAHCA) to resource authorized civilian workforce executing medical readiness contracting requirements such as awarding and administering contracts across Army Service Component Commands for medical supplies and equipment, medical-specific technicians, and contract advisory/assistance services.

MEDICAL EDUCATION AND TRAINING: provides support for education and training opportunities for personnel through the following categories: Health Professions Scholarship Program, Uniformed Services University of the Health Sciences (USUHS), Professional Development Programs for Officers, Advanced Individual Training, Post Professional Short Course Program (Continuing Medical Education (CME)), Functional Training (Skill Progression), Long Term Health Education and Training (LTHET) and Pre-deployment Training.

Army
Medical Readiness Activities
Fiscal Year (FY) 2023 President's Budget

Financial Summary:

	<u>FY 2021</u> <u>Actual</u>	<u>FY 2022</u> <u>Enactment</u>	<u>FY 2023</u> <u>Request</u>
TOTAL , BA 01: Operating Forces	1,050,167	1,104,686	897,522
TOTAL , BA 02: Mobilization	0	0	0
TOTAL , BA 03: Training and Recruiting	0	0	0
TOTAL , BA 04: Admin & Srvwide Activities	0	0	0
Total Medical Readiness Activities:	0	1,104,686	897,522

Details:

BA 01: Operating Forces

Medical Operations Support

2020A	Operational Support- Medical Readiness	229,483	245,463	272,929
2020A	Examining Services - Health Care	88,877	95,066	99,715
2020A	Army Service Component Commands	33,028	35,328	34,483
2020A	Veterinary Services	31,834	34,051	35,638
2020A	Service Medical IM/IT	16,075	17,194	21,062
2020A	Base Operating Support	200	214	247
	Total Medical Operations Support	399,497	427,316	464,074

Medical Research and Development

2020A	Base Operating Support	26,335	27,583	534
2020A	Operational Support - Medical Readiness	136,697	143,173	6,587
	Total Medical Research and Development	163,032	170,756	7,121

Army
Medical Readiness Activities
Fiscal Year (FY) 2023 President's Budget

Medical Installation Support

2020A	Base Operating Support	52,209	53,809	63,107
2020A	Military Public/Occupational Health	73,465	75,717	11,706
2020A	Facilities Sustainment	45,721	47,122	
2020A	Facilities Restoration and Modernization	19,252	19,843	
2020A	Operational Support - Medical Readiness			5,360
Total Medical Installation Support		190,647	196,491	80,173

Medical Acquisition Support

2020A	Operational Support - Medical Readiness	16,368	11,026	14,446
2020A	Service Medical IM/IT	0	6,511	302
Total Medical Acquisition Support		16,368	17,537	14,748

Medical Education and Training

2020A	Education and Training		156,740	176,764
2020A	Healthcare Professional Scholarship Program		118,070	135,670
2020A	Service Medical IM/IT		10,720	11,317
2020A	Base Operating Support	280,623	7,056	7,269
Total Medical Education and Training		280,623	292,586	331,020

Notes:

FY 2021 Appropriated includes the \$993.9M transferred from DHP to O&M Army in SAG 121
FY 2022 Estimate establishes SAG 124 Medical Readiness transferring funding from SAG 121 and SAG 133
FY 2023 Transfers funding for FSRM, Public Health Center, and Research and Development to DHP

Army
Medical Readiness Activities
Fiscal Year (FY) 2023 President's Budget

Reconciliation of Increases and Decreases:

FY 2022 Enacted		\$1,104,736
1. Price Change.....		\$38,329
2. Congressional Adjustments	\$1,772	
Minimum Wage increase	\$810	
Red Hill	\$962	
3. Transfers.....		-268,214
a) Transfers In.....		\$124,154
1) Defense Health Transfers.....	\$122,579	
Transfers funding and 1,172 FTEs from Defense Health Agency (DHA) to Army to realign directed programs. Transfers 267 FTEs and \$35,436 for the Public Health and Regional Dental Commands; transfers 639 FTEs and \$57,837 for the Office of Soldier Counsel, Troop Command, and Plans, Training, Mobilization, and Security (PTMS) missions; and transfers 266 FTEs and \$29,306 for civilian manpower cleanup action from the FY 2021 transfer.		
2. Medical Installation Support.....	\$1,575	
Transfers funding for wastewater testing from O&M Defense Wide to OMA SAG 124, Medical Readiness.		
b) Transfers Out.....		-\$392,368
1) Defense Health Transfers.....	-210,799	
Transfers funding and 658 FTEs from Operation and Maintenance, Army to Defense Health Program in order to realign programs to DHA. Transfers 547 FTEs and \$70,756 for Public Health Centers; transfers 107 FTEs and \$75,928 for deployment health activities; transfers 4 FTEs and \$500 for Continuous Process Improvement		

Army
Medical Readiness Activities
Fiscal Year (FY) 2023 President's Budget

2) Defense Health Transfers - Research and Development	-\$175,514
Transfers funding and 133 FTEs from Operation and Maintenance, Army to the Defense Health Program to support the partial transfer of the U.S. Army Medical Research and Development Command (MRDC) to DHA, including 4 of 6 laboratories.	
3) Medical Administration	(\$648)
Transfers funding and 3 FTEs from SAG 124, Medical Readiness to SAG 431, Administration to realign resources to the appropriate SAG.	
4) Medical Facility Sustainment, Restoration, and Modernization.....	(4,768)
5) U.S. Army Museum System.....	(\$639)
4. Program Increases.....	\$56,561
1) Medical Acquisition Support	\$1,823
Increases funding and 12 FTEs due to an internal realignment from Medical Operational Support to Medical Acquisition Support to properly align to the Army's Mission.	
2) Medical Education and Training Support	\$11,461
Increase funding and 103 FTEs for Training Support, Instructors, Logistics, Legal and Admin support at the Medical Center of Excellence.	
3) Medical Education and Training Support - Internal realignment	\$3,784
Increases funding and 23 FTEs due to an internal realignment from Medical Research and Development Support to Medical Education and Training Support to properly align to the Army's mission.	
4) Medical Education and Training - Scholarships	\$14,505
Increases funding for 74 additional Health Profession Scholarships to include the professions of Biomedical Sciences Nursing, Medical Specialties, Dental, Veterinarian, and Clinical Psychology. Additional scholarships ensure adequate number of health care providers in the pipeline to support readiness requirements.	

Army
Medical Readiness Activities
Fiscal Year (FY) 2023 President's Budget

5) Medical Installation Support	\$5,848
Increases funding for Military Public/ Occupational Health supplies and support equipment.	
6) Medical Operational Support	\$13,961
Increases funding to Headquarters Operational activities affecting Army Medicine, Regional Medical Readiness Commands, and Dental Health Command for contracts and supplies.	
7) Medical Research and Development Support	\$5,179
Increases funding at U.S. Army Medical Research and Development Command (MRDC) for laboratory operational costs to support Human Performance Optimization.	
5. Program Decreases.....	-\$33,890
One Time FY 22 Cost	-\$1,772
FY 2022 Congressional Add - Red Hill	-\$962
FY 22 Congressional Add - Minimum Wage	-\$810
1) Civilian Average Salary	-\$11,685
Adjusts funding because of changes to civilian compensation rates and civilian type composition within this SAG. The Army uses detailed execution and cost factor analysis to develop civilian rates.	
2) Civilian Compensable Days	-\$1,496
Reduces funding for civilian pay due to one fewer compensable day in FY 2023 than in FY 2022.	
3) Civilian Workforce Reduction	-\$2,003
Decreases FTEs and associated funding as a result of civilian workforce reductions. The Army decreased civilian manpower to more accurately reflect execution trends and to improve affordability.	
4) Medical Acquisition Support	-\$2,484
Decreases funding for mission related travel.	
5) Medical Education and Training Support	-\$8,843

Army
Medical Readiness Activities
Fiscal Year (FY) 2023 President's Budget

Decreases funding for contract support to insource FTE growth at the U.S. Medical Center of Excellence.

6) Medical Operational Support - Internal realignment -\$1,823
Decrease funding and 12 FTEs due to an internal realignment from Medical Operational Support to Medical Acquisition Support to properly align to the Army's Mission.

7) Medical Research and Development Support - Internal Realignment -\$3,784
Decreases funding and 23 FTEs due to an internal realignment from Medical Research and Development Support to Medical Education and Training Support to align properly with the Army's mission.

FY 2023 Budget Request..... 897,522

Army
Medical Readiness Activities
Fiscal Year (FY) 2023 President's Budget

Performance Criteria and Evaluation Summary:

	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>
1) Medical Readiness			
Medically Ready to Deploy ¹	446,581	431,873	434,081
Dentally Ready to Deploy ²	480,743	467,029	469,277
	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>
2) Medical Operations Support			
% Semi-annual Working Dog Physical Exams 180 Days or less	≥ 90.0%	≥ 90.0%	≥ 90.0%
% Consolidated Commercial Audit Food Program Performance	≥ 90.0%	≥ 90.0%	≥ 90.0%
Optical Fabrication	700,000	700,000	700,000
	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>
3) Medical Research and Development			
Army Medical Research Labs	6	6	2
	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>
4) Medical Education and Training			
Health Profession Scholarship	1,618	1,638	1,692
Officer/Enlisted Primary Training	5,440	6,088	6,654
Other Training - Medical Function Training ¹	18,193	21,138	24,919

Notes:

1) ¹Medically Ready to Deploy includes all active duty military that are medically cleared to deploy (PHA, immunizations, labs, profiles).

²Dentally Ready to Deploy includes all active duty military that are classified as Dental Class I or 2.

2.) This metric tracks the percentage of Military Working Dogs (MWDs) whose most recent semiannual physical examination (SAPE) occurred within the last 180 days (as of the end of the specified month). Statutory Requirements/Guidance: Army Regulation 40–905 SECNAVINST 6401.1B AFI 48–131. Optical Fabrication are based on 250,000 inserts and 450,000 pairs of glasses. Frame production numbers are pulled from DOFEMS (Defense Optical Fabrication Enterprise Management System).

3) Medical Research and Development includes currently funded DoD Congressionally directed medical research programs. MRDC has eight (8) subordinate commands of which there are six (6) Medical Research Labs: US Army Aeromedical Research Lab (USAARL), US Army Institute of Surgical Research (USAISR), US Army Medical Research Institute of Chemical Defense (USAMRICD), U.S. Army Medical Research Institute of Infectious Diseases (USAMRIID), US Army Research Institute of Environmental Medicine (USARIEM), US Army Walter Reed Institute of Research (WRAIR). The Army will only retain USAARL and USARIEM starting in FY 23.

4) ¹Other Training includes leadership and skills progression courses as well as professional development training.

Army
Medical Readiness Activities
Fiscal Year (FY) 2023 President's Budget

Personnel Summary: Total

	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Change</u> <u>FY 2022/2023</u>
<u>Active Military End Strength (E/S) (Total)</u>	0	427	3,671	3,244
Officer	0	330	1,242	912
Enlisted	0	97	2,429	2,332
				0
<u>Active Military Average Strength (A/S) (Total)</u>	0	214	2,049	1,835
Officer	0	165	786	621
Enlisted	0	49	1,263	1,214
				0
<u>Civilian FTEs (Total)</u>	0	3,839	4,321	482
<u>DIRECT FUNDED (DOES NOT INCLUDE MILITARY TECHNICIANS)</u>	0	3,808	4,273	465
U.S. Direct Hire	0	3,588	3,948	360
Foreign National Direct Hire	0	7	74	67
Total Direct Hire	0	3,595	4,022	427
Foreign National Indirect Hire	0	213	251	38
				0
<u>REIMBURSABLE FUNDED</u>	0	31	39	8
U.S. Direct Hire	0	0	0	0
Foreign National Direct Hire	0	0	0	0
Total Direct Hire	0	0	0	0
Foreign National Indirect Hire	0	31	39	8
				0
<u>Annual Civilian Salary Cost</u>	0	129	129	0
				0
<u>Contractor FTEs (Total)</u>	0	1,827	498	-1,329

Army
Medical Readiness Activities
Fiscal Year (FY) 2023 President's Budget

OP-32A Line Items: Total

	FY 2021	FC Rate	Price	Price	Program	FY 2022	FC Rate	Price	Price	Program	FY 2023	
	<u>Program</u>	<u>Diff</u>	<u>Growth</u>	<u>Growth</u>	<u>Growth</u>	<u>Program</u>	<u>Diff</u>	<u>Percent</u>	<u>Growth</u>	<u>Growth</u>	<u>Program</u>	
<u>CIVILIAN PERSONNEL COMPENSATION</u>												
0101	EXECUTIVE, GENERAL AND SPECIAL SCHEDULES	0	0	0	3,224	467,249	470,473	0	4.37%	20,559	31,414	522,446
0103	WAGE BOARD	0	0	0	17	3,627	3,644	0	6.94%	253	3,307	7,204
0104	FOREIGN NATIONAL DIRECT HIRE (FNDH)	0	0	0	0	118	118	45	16.56%	27	1,476	1,666
0199	TOTAL CIVILIAN PERSONNEL COMPENSATION	0	0	0	3,241	470,994	474,235	45		20,839	36,202	531,321
<u>TRAVEL</u>												
0308	TRAVEL OF PERSONS											
0399	TOTAL TRAVEL	0	0	3.00%	0	26,900	26,900	0	2.10%	565	(10,065)	17,400
		0	0	3.00%		26,900	26,900	-	0	565	(10,065)	17,400
<u>DEFENSE WORKING CAPITAL FUND SUPPLIES AND MATERIALS</u>												
0416	GSA MANAGED SUPPLIES AND MATERIALS	0	0	3.00%	0	1,570	1,570	0	2.10%	33	167	1,770
0422	DLA MATERIEL SUPPLY CHAIN (MEDICAL)	0	0	0.20%	0	1,801	1,801	0	0.66%	12	0	1,813
0499	TOTAL SUPPLIES AND MATERIALS PURCHASES	0	0		0	3,371	3371	0		45	167	3583
<u>DEFENSE WORKING CAPITAL FUND EQUIPMENT PURCHASES</u>												
0506	DLA MATERIEL SUPPLY CHAIN (CONSTRUCTION AND EQUIP)	0	0	2.20%	0	32,221	32,221	0	0.66%	213	(2,294)	30,140
0599	TOTAL STOCK FUND EQUIPMENT PURCHASES	0	0	0.00%	0	32,221	32,221	0		213	(2,294)	30,140
<u>OTHER PURCHASES</u>												
0901	FOREIGN NATIONAL INDIRECT HIRE (FNIH)	0	451	0.00%	0	15,043	15,494	656	4.05%	654	2,883	19,637
0920	SUPPLIES AND MATERIALS (NON-FUND)	0	0	3.00%	0	51,266	51,266	0	2.10%	1,077	(38,996)	13,347
0921	PRINTING AND REPRODUCTION	0	0	3.00%	0	1,604	1,604	0	2.10%	34	-	1,638
0922	EQUIPMENT MAINTENANCE BY CONTRACT	0	0	3.00%	0	14,671	14,671	0	2.10%	308	(4,308)	10,671
0923	OPERATION AND MAINTENANCE OF FACILITIES	0	0	3.00%	0	51,565	51,565	0	2.10%	1,083	(52,648)	-
0924	PHARMACEUTICAL DRUGS	0	0	4.10%	0	49,144	49,144	0	4.00%	1,966	(39,966)	11,144
0925	EQUIPMENT PURCHASES (NON-FUND)	0	0	3.00%	0	16,292	16,292	0	2.10%	342	(5,000)	11,634
0930	OTHER DEPOT MAINTENANCE (NON-FUND)	0	0	3.00%	0	174	174	0	2.10%	4	-	178
0932	MANAGEMENT AND PROFESSIONAL SUPPORT SERVICES	0	0	3.00%	0	19,543	19,543	0	2.10%	410	(12,817)	7,136
0933	STUDIES, ANALYSIS AND EVALUATIONS	0	0	3.00%	0	1,000	1,000	0	2.10%	21	(1,000)	21
0936	TRAINING AND LEADERSHIP DEVELOPMENT (OTHER CONTR)	0	0	3.00%	0	4,608	4,608	0	2.10%	97	(2,316)	2,389
0955	MEDICAL CARE	0	0	4.10%	0	78,488	78,488	0	4.00%	3,140	(53,986)	27,642
0957	LAND AND STRUCTURES	0	0	3.00%	0	6,625	6,625	0	2.10%	139	(5,139)	1,625
0986	MEDICAL CARE CONTRACTS	0	0	4.10%	0	67,552	67,552	0	4.00%	2,702	(53,656)	16,598
0987	OTHER INTRA-GOVERNMENT PURCHASES	0	0	3.00%	0	58,419	58,419	0	2.10%	1,227	(33,271)	26,375
0988	GRANTS SUBSIDIES AND CONTRIBUTIONS	0	0	3.00%	0	6,396	6,396	0	2.10%	134	(6,530)	-
0989	OTHER SERVICES	0	0	3.00%	0	62,971	62,971	0	2.10%	1,322	(37,521)	26,772
0990	IT CONTRACT SUPPORT SERVICES	0	0	3.00%	0	62,197	62,197	0	2.10%	1,206	(52,849)	10,654
0993	OTHER SERVICES - SCHOLARSHIPS	0	0	3.00%	0	0	0	0	2.10%	0	127,617	127,617
0999	TOTAL OTHER PURCHASES	0	451		0	567558	568009	656		15866	(269,503)	315,078
9999	GRAND TOTAL	0	451		3,241	1,101,044	1,104,736	701		37,528	(245,493)	897,522

NAVY
Medical Readiness Activities
Fiscal Year (FY) 2023 President's Budget

Description of Operations Financed:

MEDICAL READINESS: provides manpower and operational support to Medical organizations and capabilities to include education and training opportunities for health care professionals, medical logistic support, basic municipal services to operate facilities, medical research, and acquisition of capital equipment.

MEDICAL OPERATIONS SUPPORT: provides resources for (1) integrated, automated medical information addressing the functional areas including service member's entry exams, medical logistics, patient regulation and evacuation, medical threat/intelligence, health care delivery, food protection/veterinary, optical fabrication, and administrative efforts; (2) deployment health, medical readiness data systems/information management, medical simulation training; (3) manpower for public affairs and information requirements; and (4) other medical operations activities.

MEDICAL RESEARCH AND DEVELOPMENT: provides resources for medical research and innovative product development used to prevent and mitigate injuries to service member's in the deployed environment. Provides resources to support Congressionally Directed Medical Research Programs and several Centers of Excellence that support enhanced operational performance, mission readiness, and quality of life through collaborative leadership and advocacy for healing.

MEDICAL FACILITIES AND INSTALLATION SUPPORT: provides resources necessary for sustainment, restoration, and modernization of facilities supporting medical readiness, as well as operation of installation public health centers, pre-hospital emergency services, and facility engineering.

MEDICAL ACQUISITION SUPPORT: provides resources for efforts related to medical readiness such as Tri-Service IM/IT programs, authorized civilian workforce performing medical research, laboratory infrastructure and management support for selected US and overseas laboratories.

MEDICAL EDUCATION AND TRAINING: provides support for education and training opportunities for personnel through the following categories: Health Professions Scholarship Program, Uniformed Services University of the Health Sciences (USUHS), Professional Military Education, Continuing Medical Education, Functional Training, Long Term Health Education and Training, and Pre-Deployment Training.

NAVY
Medical Readiness Activities
Fiscal Year (FY) 2023 President's Budget

Financial Summary:

	<u>FY 2021</u> <u>Actual</u>	<u>FY 2022</u> <u>Enacted</u>	<u>FY 2023</u> <u>Request</u>
TOTAL , BA 01: Operating Forces	104,834	83,787	79,529
TOTAL , BA 02: Mobilization	31,945	24,738	25,667
TOTAL , BA 03: Training and Recruiting	110,279	119,418	137,068
TOTAL , BA 04: Admin & Srvwide Activities	261,806	321,075	344,392
Total Medical Readiness Activities:	508,864	549,018	586,656

Details:

BA 01: Operating Forces

Medical Operations Support

2021A 1B1B Mission and Other Ship Operations	7,638	0	0
2021A BSIT Enterprise Information Technology	0	2,636	3,061
2021A BSS1 Base Operating Support	1,451	0	0
Total Medical Operations Support	9,089	2,636	3,061

Medical Research and Development

	0	0	0
Total Medical Research and Development	0	0	0

Medical Facilities and Installation Support

18 2021A BSS1 Base Operating Support	13,420	0	0
18 2021A BSM1 Sustainment, Restoration and Modernization	1,314	0	0
52 2021A BSS1 Base Operating Support	25,507	29,100	19,891
52 2021A BSM1 Sustainment, Restoration and Modernization	54,073	51,118	55,621
Total Medical Facilities and Installation Support	94,314	80,218	75,512

NAVY
Medical Readiness Activities
Fiscal Year (FY) 2023 President's Budget

Medical Acquisition Support

2021A	BSS1	Base Operating Support	0	0	0
2021A	BSIT	Enterprise Information Technology	1,431	933	956
Total Medical Acquisition Support			1,431	933	956

Medical Education and Training

			0	0	0
Total Medical Education and Training			0	0	0

Notes:
 FY 2021 all BSS1 & BSM1 (Facilities funding) was transferred to CNIC, \$16,185 was returned back to BUMED for Labor funding that was erroneously transferred to CNIC as part of the PB21 DWR

NAVY
Medical Readiness Activities
Fiscal Year (FY) 2023 President's Budget

Financial Summary:

	FY 2021 <u>Actual</u>	FY 2022 <u>Enacted</u>	FY 2023 <u>Request</u>
TOTAL , BA 01: Operating Forces	104,834	83,787	79,529
TOTAL , BA 02: Mobilization	31,945	24,738	25,667
TOTAL , BA 03: Training and Recruiting	110,279	119,418	137,068
TOTAL , BA 04: Admin & Srvwide Activities	261,806	321,075	344,392
Total Medical Readiness Activities:	508,864	549,018	586,656

Details:

BA 02: Mobilization

Medical Operations Support

2021A 2C1H Expeditionary Health Services Systems	31,945	24,738	25,667
Total Medical Operations Support	31,945	24,738	25,667

Medical Research and Development

Total Medical Research and Development	0	0	0
Total Medical Research and Development	0	0	0

Medical Facilities and Installation Support

Total Medical Facilities and Installation Support	0	0	0
Total Medical Facilities and Installation Support	0	0	0

Medical Acquisition Support

Total Medical Acquisition Support	0	0	0
Total Medical Acquisition Support	0	0	0

Medical Education and Training

Total Medical Education and Training	0	0	0
Total Medical Education and Training	0	0	0

Notes:

Includes Over the Horizon/Enduring OMN funding

NAVY
Medical Readiness Activities
Fiscal Year (FY) 2023 President's Budget

Financial Summary:

	<u>FY 2021</u> <u>Actual</u>	<u>FY 2022</u> <u>Enacted</u>	<u>FY 2023</u> <u>Request</u>
TOTAL , BA 01: Operating Forces	104,834	83,787	79,529
TOTAL , BA 02: Mobilization	31,945	24,738	25,667
TOTAL , BA 03: Training and Recruiting	110,279	119,418	137,068
TOTAL , BA 04: Admin & Srvwide Activities	261,806	321,075	344,392
Total Medical Readiness Activities:	508,864	549,018	586,656

Details:

BA 03: Training and Recruiting

Medical Operations Support

2021A 3B3K Health Care Pre-Commissioning Professional School	0	0	0
2021A 3B3K Education and Training - Health Care	0	0	0
2021A 3B3K Education and Training - Medical Readiness	0	0	7,271
Total Medical Operations Support	0	0	7,271

Medical Research and Development

	0	0	0
Total Medical Research and Development	0	0	0

Medical Facilities and Installation Support

	0	0	0
Total Medical Facilities and Installation Support	0	0	0

Medical Acquisition Support

	0	0	0
Total Medical Acquisition Support	0	0	0

Medical Education and Training

2021A 3B3K Health Care Pre-Commissioning Professional School	76,340	84,398	92,239
2021A 3B3K Education and Training - Medical Readiness	33,939	35,020	37,558
Total Medical Education and Training	110,279	119,418	137,068

Notes:

FY23 Increase is attributed to an increase in Travel of Persons due to additional travel to training and exercises that support meeting the mission requirement of a medically trained force within the Health Professions Scholarship Program (HPSP).

NAVY
Medical Readiness Activities
Fiscal Year (FY) 2023 President's Budget

Financial Summary:

	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>
	<u>Actual</u>	<u>Enacted</u>	<u>Request</u>
TOTAL , BA 01: Operating Forces	104,834	83,787	79,529
TOTAL , BA 02: Mobilization	31,945	24,738	25,667
TOTAL , BA 03: Training and Recruiting	110,279	119,418	137,068
TOTAL , BA 04: Admin & Srvwide Activities	261,806	321,075	344,392
 Total Medical Readiness Activities:	 508,864	 549,018	 586,656

Details:

BA 04: Admin & Srvwide Activities

Medical Operations Support

2021A 4A1M Administration	47,965	52,287	53,557
2021A 4A8M Medical Activities	125,972	207,563	223,934
2021A 4B2E Environmental Programs	956	-	-
 Total Medical Operations Support	 174,893	 259,850	 277,491

Medical Research and Development

	0	0	0
Total Medical Research and Development	0	0	0

Medical Facilities and Installation Support

	0	0	0
Total Medical Facilities and Installation Support	0	0	0

Medical Acquisition Support

2021A 4A8M Medical Activities	38,800	35,592	40,729
 Total Medical Acquisition Support	 38,800	 35,592	 40,729

NAVY
Medical Readiness Activities
Fiscal Year (FY) 2023 President's Budget

Medical Education and Training

2021A	4A1M	Administration	5,636	5,752	5,873
2021A	4A8M	Medical Activities	19,483	19,881	20,299
Total Medical Education and Training			25,119	25,633	26,172
			238,812	321,075	344,392

NAVY
Medical Readiness Activities
Fiscal Year (FY) 2023 President's Budget

Personnel Summary: Total

	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Change</u> <u>FY 2022/2023</u>
<u>BSO-18 DHP</u>				
<u>Active Military End Strength (E/S) (Total)</u>	26,085	25,953	25,699	(254)
Officer	8,056	7,966	7,876	(90)
Enlisted	18,029	17,987	17,823	(164)
<u>Active Military Average Strength (A/S) (Total)</u>	26,535	26,019	25,826	(193)
Officer	8,182	8,011	7,921	(90)
Enlisted	18,353	18,008	17,905	(103)
<u>BSO-18 NON DHP</u>				
<u>Active Military End Strength (E/S) (Total)</u>	537	548	637	89
Officer	352	357	429	72
Enlisted	185	191	208	17
<u>Active Military Average Strength (A/S) (Total)</u>	531	543	593	50
Officer	352	355	393	39
Enlisted	180	188	200	12
<u>BSO-18 CIVLABOR</u>				
<u>Civilian FTEs (Total)</u>	0	0	0	-
<u>DIRECT FUNDED (DOES NOT INCLUDE MILITARY TECHNICIANS)</u>				
U.S. Direct Hire	1,306	1,048	1,043	(5)
Foreign National Direct Hire	0	2	2	-
Total Direct Hire	0	0	0	-
Foreign National Indirect Hire	0	0	0	-
<u>REIMBURSABLE FUNDED</u>				
U.S. Direct Hire	163	163	173	10
Foreign National Direct Hire	0	0	0	-
Total Direct Hire	0	0	0	-
Foreign National Indirect Hire	0	0	0	-
<u>Annual Civilian Salary Cost</u>	111	125	129	4
<u>Contractor FTEs (Total)</u>	0	0	0	-

- Notes:
- i) The FY21 Reimbursable FTE represent Direct Support Cell Staff that due to complications of the ongoing COVID-19 pandemic, delayed transfer over to the Defense Health Agency (DHA). The personnel officially realigned from being Department of Navy (DoN) civilians to the DHA in FY2022.
 - ii) The FY22 and FY23 Reimbursable FTE represent the Navy Medicine Counter Drug program that is budgeted as a Reimbursable in the out years and executed as direct during the year of execution.
 - iii) Net changes in overall end strength do not reflect reductions in MILPERS, but are due to realignment of resources within Budget Submitting Office (BSO) 18 from the Defense Health Program (DHP) to Navy Line as well as realignments from BSO 18 to other BSOs as part of the FY23 Program Decision Memorandum II Manpower MOA adjustments

NAVY
Medical Readiness Activities
Fiscal Year (FY) 2023 President's Budget

Enterprise Information Technology Reconciliation of Increases and Decreases

FY 2022 Current Enacted		\$3,569
1. Price Change.....		\$115
2. Transfers.....		\$0
a) Transfers In.....		\$0
b) Transfers Out.....		\$0
3. Program Increases.....	333	
1) Navy Secret Internet Protocol Router Network (SIPRNET).....	333	
i) Increase is attributed to a larger number of site surveys in support of addressing Navy Secret Internet Protocol Router Network (SIPRNET) capability gaps at OCONUS Medical Readiness facilities beginning in FY23. The site surveys will establish the funding gap to the requirement for Readiness and Training Command platforms to have efficient access to SIPRNET capability. United States Fleet Forces (USFF) requires each unit to report two fleet readiness reports on Defense Readiness Reporting System – Strategic (DRRS-S) via SIPRNET with feedback that will be passed to the Office of the Secretary of Defense every month.		
FY 2023 Budget Request		\$4,017

NAVY
Medical Readiness Activities
Fiscal Year (FY) 2023 President's Budget

Expeditionary Health Services Systems Reconciliation of Increases and Decreases

FY 2022 Current Enacted	\$24,738
1. Price Change.....	\$613
2. Transfers.....	(\$750)
a) Transfers Out.....	-750
1) PMS408 Program Management Office.....	(\$750)
i) The Transfer Out represents the functional transfer of duty between Navy Medicine and NAVSEA to establish the PMS408 Program Management Office to provide acquisition oversight, program management, and capability development to sustain and provide enhanced medical capability to support Distributed Maritime Operations.	
3. Program Increases.....	1066
1) Program Increase in FY2023.....	1066
i) A budgetary increase of \$1,059K is required to ensure rapid requirement task orders are funded and thus, executed. Moreover, the Fiscal Year 2023 increase is required to re-stock materiel associated with FDP MU, JMPAB, EMF-144A, EMF-144G, EMF-CP1, EMF-CP2, and ERSS. Overall, the budgetary increase facilitates operational requirements and time sensitive tasks via high fill-rates of deployed push blocks.	
FY 2023 Budget Request	\$25,667

NAVY
Medical Readiness Activities
Fiscal Year (FY) 2023 President's Budget

Professional Development Education Reconciliation of Increases and Decreases

FY 2022 Current Enacted		\$119,418
1. Price Change.....		\$4,335
2) ICC Realignment		-5924
3. Program Increases.....	20802	
1) Health Care Pre-Commissioning Professional School.....	13519	
i) Increase in Travel of Persons is due to additional travel to training and exercises that support meeting the mission requirement of a medically trained force within the Health Professions Scholarship Program (HPSP).		
2) Education and Training - Medical Readiness.....	7271	
i) Increase in Education and Training is primarily attributed to enhancing Medical Readiness Initiatives supporting operational requirements including the Combat Skills Training and the Navy Knowledge Skills and Abilities (NKSA) that assess and enhance the medical readiness of every medical platform. These programs are required as part of the PB21 Defense Wide Review Medical Readiness transfer of functions outside of Medical Treatment Facilities from O&M DHP to O&M Navy.		
ii) Increase in Civilian Personnel Compensation is based on the grade mix of personnel supporting Medical Readiness training requirements.		
4. Program Decreases.....	-1563	
1) Education and Training - Medical Readiness.....	-1563	
i) The decrease is attributed to the ICC realignment to properly realign Navy Medicine Medical Readiness training funding between ICC 955: Medical Care and 935: Training and Leadership Development. The program decreased because of a rate drop from 3.85% to 2.0% for the anticipated price increase for training expenditures.		
ii) Decrease in salary due to change in paid days from 261 to 260.		
iii) The decrease is a one time FY2023 reduction in cost in relation to FY22 SECNAV Mental Health Initiative funding that supports expanded training for the Navy Drug and Alcohol Counselor School (NDOCS).		
FY 2023 Budget Request		\$137,068

NAVY
Medical Readiness Activities
Fiscal Year (FY) 2023 President's Budget

Administration Reconciliation of Increases and Decreases:

FY 2022 Current Enacted		\$58,039
1. Price Change.....		\$2,383
2. Transfers.....		(\$183)
a) Transfers Out.....	-183	
1) Decrease in Civilian Personnel Compensation.....		(\$183)
Decrease in Civilian Personnel Compensation is attributed to a billet transfer from Navy Medicine to CNO-N44 to create the Medical Systems Integration and Combat Survivability Division.		
4. Program Decreases.....	-809	
a) One-Time FY2023 Costs.....	-226	
i) Decrease in salary due to change in paid days from 261 to 260.		
2) International Cooperative Administrative Support Services (ICASS).....	-57	
i) Net decrease in funding for International Cooperative Administrative Support Services (ICASS) administrative support services abroad for the Navy Medicine Research Labs OCONUS facilities.		
2) Price Change Correction.....	-81	
i) The decrease is attributed to an incorrect price change of 2.5% being applied to the civilian personnel baseline instead of the 4.15% increase that was mandated across the DON.		
3) Civilian Labor Funding.....	-445	
i) Decrease is attributed to Office of Secretary of Defense and Cost Assessment and Program Evaluation directed 10% reduction in civilian labor funding across the Department of the Navy. Navy Medicine identified efficiencies within headquarters administration functions to meet the mark.		
FY 2023 Budget Request		\$59,430

NAVY
Medical Readiness Activities
Fiscal Year (FY) 2023 President's Budget

Medical Activities Reconciliation of Increases and Decreases:

FY 2022 Current Enacted		\$285,436
1. Congressional Adjustments.....		(\$22,400)
a) Distributed Adjustments.....		500
i) Program Increase - Implementaton of the IRC on Sexual Assault in the Military (Baseline: \$0)	500	
b) Undistributed Adjustments.....		-22,900
i) FY2022 OMNIBUS Undistributed Unjustified Growth \$70M (Baseline: \$0)	-22,900	
FY 2022 Current Estimate		263,036
Price Change		7,966
2. Transfers.....		(\$1,500)
b) Transfers Out.....	-1500	
1) Naval Expeditionary Health Service Support (NEHSS) Program Management Office (PMO)		(\$1,500)
i) The decrease in Navy readiness Reporting and Preparedness is tied to the realignment of function and funding for the Naval Expeditionary Health Service Support (NEHSS) Program Management Office (PMO) to NAVSEA from Navy Medicine.		
3. Program Increases.....		\$37,267
1) One-Time FY 2023 Costs.....	3516	
i) Net increase in Operational Medicine is attributed to a one time increase of Personal Protective Equipment (PPE) for Non-Medical personnel.		
ii) Net increase is attributed to a one time increase in Operational Medicine for OCONUS Navy Pilot psychological testing.		
iii) Net increase in Industrial Operations is attributed to a one time increase of funds to support the Navy Medicine COVID Task Force's wastewater testing capabilities to inform future decisions regarding Public Health.		
2) Program Increase in FY 2023.....	33751	
i) Increase in Fleet Programs is primarily attributed to enhancing Medical Readiness Initiatives supporting operational requirements including the Family of Systems Naval Expeditionary Health Service Support (NEHSS) and Unit Deployment Planning (UDP). These programs are required as part of the PB21 Defense Wide Review Medical Readiness transfer of functions outside of Medical Treatment Facilities from O&M DHP to O&M Navy.		
ii) Net increase is attributed to the Independent Review Commissions (IRC) recommendations for the Sexual Assault Prevention and Response (SAPR) programs increased forensic evidence collection.		
4. Program Decreases.....	-21807	
1) One-Time FY 2023 Costs.....	-21234	
i) Decrease in salary due to change in paid days from 261 to 260.		
ii) Decrease is attributed to a one time Congressional Add for the implementation of the Independent Review Commission on Sexual Assault in the Military. (Baseline: \$0)		
iii) Decrease in Operational Medicine is attributed to a one time Congressional Add for the implementation of the Independent Review Commission on Sexual Assault in the Military. (Baseline: \$0)		
iv) The decrease is attributed to one time FY22 SECNAV Mental Health Initiatives that were enhancements to the baseline Mental Health programs provided by Navy Medicine in FY22. The decrease is tied to Force Medical Readiness: Disability Evaluation System (\$13,410K), Operational Health Informatics: HERCULES (\$5,735K), Enterprise Operations: LIMDU SMART (\$1,200K), and Force Medical Readiness: Dedicated Mental Health Analyst (\$166)		
2) Program Decreases in FY 2023.....	-573	
i) The decrease in Industrial Operations is attributed to an efficiency realized in annual survey completed for the Industrial Hygiene program		
ii) Decrease in Operational Medicine funding is the result of Total Force Management reduction to efficiencies in the Navy Medicine OCMO SSC Contractor Services.		
FY 2023 Budget Request		\$284,962

NAVY
Medical Readiness Activities
Fiscal Year (FY) 2023 President's Budget

Performance Criteria and Evaluation Summary:

	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>
1) Medical Readiness			
Medically Ready to Deploy ¹ (Goal = 90%)	82%	84.5%	90%
Dentally Ready to Deploy ² (Goal = 95%)	87.2%	89.6%	95%
	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>
2) Medical Operations Support			
Expeditionary Medical Support Facilities (EMF), 150 bed	8	8	8
Expeditionary Medical Units (EMU), 10 Bed	4	4	4
Total Number of Expeditionary Beds:	1,240	1,240	1,240
Forward Deployable Preventive Medicine Units (FDPMU)	4	4	4
USNS MERCY – exercises per year	2	2	2
USNS COMFORT – exercises per year	2	2	2
Drug Demand Reduction Program (DDRP) – Navy Military Drug Testing (Total Specimens Tested)	1,361,555	-	-
DDRP – Navy Military Drug Testing Funding (\$K)	\$25,559	\$0	\$0
International Cooperative Administrative Support (ICASS)	\$732	\$717	\$732
Financial Improvement and Audit Readiness (FIAR)	\$1,042	\$923	\$953
Medical Headquarters	\$51,701	\$56,082	\$57,417
DOD Workforce Rationalization Plan Personnel	\$126	\$317	\$328
	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>
3) Medical Research and Development			
Traumatic Brain Injury and Psychological Health	\$15,092	\$15,400	\$15,900
	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>
4) Medical Facilities and Installation Support			
Facilities Sustainment Funding ¹	1232	0	0
Facilities Restoration and Modernization ¹	82	0	0
Total Medical Facilities and Installation Support Funding	\$1,314	\$0	\$0
	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>
5) Medical Acquisition Support			
Total Medical Acquisition Support Funding	\$40,231	\$36,525	\$41,705
USNS MERCY/COMFORT Medical Equipment Replacement (\$K)	\$1,963	\$3,712	\$3,785
Shipboard Equipment Replacement Program (SERP), (\$K)	\$1,993	\$0	\$0
Expeditionary Resuscitative Surgical System-Pacific (ERSS-P), (\$K)	\$0	\$481	\$292

NAVY
Medical Readiness Activities
Fiscal Year (FY) 2023 President's Budget

	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>
6) Medical Education and Training			
Total Medical Education and Training Funding	\$135,398	\$145,051	\$144,026
HPSP – Health Professions Scholarship Program (# Candidates)	1,265	1,265	1,231
FAP – Financial Assistance Program (# Candidates)	33	33	29
HPLRP – Health Professionals Loan Repayment Program (# Candidates)	24	24	20
NCP - Nurse Candidate Program (# Candidates)	85	85	72
GME – Graduate Medical Education (# Candidates)	1,408	1,408	1,408
Other Professional Development (# Candidates)	605	605	605
Service Specific Training (# Candidates)	800	800	800

Notes:

1) ¹Medically Ready to Deploy includes all active duty military that are medically available to deploy (Total Force Medical Readiness (TFMR) = Fully Medically Ready (FMR) + Partially Medically Ready (PMR). Status for FY21 is as of 1 OCT 2021, FY22 as of 1 JAN 2022, FY23 is goal of 90%, updated 7 MAR 2022. Total AD Denominator FY22: 280,195; FY21: 284,715.

2) ²Dentally Ready to Deploy includes all active duty military that are classified as Dental Class I or 2. Status for FY21 is as of 1 OCT 2021, FY22 as of 1 JAN 2022, FY23 is goal of 95%. Total AD Denominator FY22: 280,195; FY21: 284,715.

3) Medical Research and Development includes currently funded DoD Congressionally directed medical research programs.

4) ¹Facilities Sustainment includes major repairs such as the replacement of roofs, heating and cooling systems, tile surfaces and carpeting, and wall surface refinishing. It also resources regularly scheduled adjustments and inspections, preventive maintenance tasks, and emergency response and service calls for minor repairs. It does not resource environmental compliance costs, facility leases, custodial and grounds services, waste disposal, and utilities. FY22 & FY23 Funding is transferred from CNIC and is not reported in BUMED Base funding.

5) ² Facilities Restoration and Modernization resources the restoration of real property to such a condition that it may be used for its' designated purpose. Restoration includes repair or replacement work to restore facilities damaged by inadequate sustainment, excessive age, natural disaster, fire, accident, or other causes.

6) ¹Other Training includes leadership and skills progression courses as well as professional development training.

NAVY
Medical Readiness Activities
Fiscal Year (FY) 2023 President's Budget

OP-32A Line Items: Total

	FY 2021 Program	FC Rate Diff	Price Growth Percent	Price Growth	Program Growth	FY 2022 Program	FC Rate Diff	Price Growth Percent	Price Growth	Program Growth	FY 2023 Program	
<u>CIVILIAN PERSONNEL COMPENSATION</u>												
0101	EXECUTIVE, GENERAL AND SPECIAL SCHEDULES	144802			3283	-16646	131440			5426	-2157	134709
0103	WAGE BOARD				0	0				0	0	
0104	FOREIGN NATIONAL DIRECT HIRE (FNDH)	0			1	0	49			2	-1	50
0110	UNEMPLOYED COMPENSATION	11			0	0	0					0
0199	TOTAL CIVILIAN PERSONNEL COMPENSATION	144813	0	0	3284	-16646	131489	0	0	5428	-2158	134759
<u>TRAVEL</u>												
0308	TRAVEL OF PERSONS	5224			158	4807	9835			205	14493	24887
0399	TOTAL TRAVEL	5224	0		158	4807	9835	0		205	14493	24887
<u>DEFENSE WORKING CAPITAL FUND SUPPLIES AND MATERIALS</u>												
0416	GSA MANAGED SUPPLIES AND MATERIALS	0			0	2095	2095			44	-2039	100
0417	LOCAL PURCHASE MANAGED SUPPLIES & MATERIALS	0			0	28298	28298			594	-15079	13813
0422	DLA MATERIEL SUPPLY CHAIN (MEDICAL)	0			0	0	0			0	317	317
0499	TOTAL SUPPLIES AND MATERIALS PURCHASES	0	0		0	30393	30393	0		638	-16801	14230
<u>DEFENSE WORKING CAPITAL FUND EQUIPMENT PURCHASES</u>												
0506	DLA MATERIEL SUPPLY CHAIN (CONSTRUCTION AND EQUIP)				0	0						
0507	GSA MANAGED EQUIPMENT				0	1824	1824			38	-1762	100
0599	TOTAL STOCK FUND EQUIPMENT PURCHASES	0	0	0	0	1824	1824	0	0	38	-1762	100
<u>OTHER WORKING CAPITAL FUND PURCHASES (EXCL TRANSPORTATION)</u>												
0671	DISN SUBSCRIPTION SERVICES (DSS)	0			0	3	3			0	9	12
0675	DLA DISPOSITION SERVICES	0			0	1	1			0	-1	0
0679	COST REIMBURSABLE PURCHASES				0	1	1			0	-1	0
0699	TOTAL OTHER WORKING CAPITAL FUND PURCHASES (EXCL TRANSPORTATION)	0	0	0	0	5	5	0	0	0	7	12
<u>TRANSPORTATION</u>												
0706	AMC CHANNEL PASSENGER	327			10	-337	0			0	317	317
0771	COMMERCIAL TRANSPORTATION	3631			110	-617	3124			65	350	3539
0799	TOTAL TRANSPORTATION PURCHASES	3958	0		120	-954	3124	0		65	667	3856
<u>OTHER PURCHASES</u>												
0912	RENTAL PAYMENTS TO GSA (SLUC)	9			0	-9				0	0	0
0913	PURCHASED UTILITIES (NON-FUND)	376			12	29	417			9	53	479
0914	PURCHASED COMMUNICATIONS (NON-FUND)	0			0	12	12			0	0	12
0915	RENTS (NON-GSA)	313			9	319	641			13	-5	649
0920	SUPPLIES AND MATERIALS (NON-FUND)	37002			1111	-29667	8446			178	1504	10128
0921	PRINTING AND REPRODUCTION	163			5	95	263			6	39	308
0922	EQUIPMENT MAINTENANCE BY CONTRACT	6046			180	704	6930			145	1020	8095
0923	OPERATION AND MAINTENANCE OF FACILITIES	8046			240	-3292	4994			105	195	5294
0924	PHARMACEUTICAL DRUGS	0			0	610	610			24	7	641
0925	EQUIPMENT PURCHASES (NON-FUND)	17072			513	52379	69964			1469	9555	80988
0932	MANAGEMENT AND PROFESSIONAL SUPPORT SERVICES	78733			2363	-79325	1771			37	262	2070
0933	STUDIES, ANALYSIS, & EVALUATIONS	0			0	16101	16101			338	2385	18824
0935	TRAINING AND LEADERSHIP DEVELOPMENT	0			0	0	0			0	104631	104631
0955	MEDICAL CARE	79527			3260	50800	133587			5344	-82976	55955
0957	LAND AND STRUCTURES	688			21	-709	0			0	0	0
0964	SUBSISTENCE AND SUPPORT OF PERSONS	1223			37	-1260	0			0	0	0
0985	RESEARCH AND DEVELOPMENT CONTRACTS	14444			0	-14444	0			0	0	0
0986	MEDICAL CARE CONTRACTS	0			0	18585	18585			743	109	19437
0987	OTHER INTRA-GOVERNMENT PURCHASES	17767			533	-13647	4653			98	-1260	3491
0989	OTHER SERVICES	13880			415	10861	25156			529	-5317	20368
0990	IT CONTRACT SUPPORT SERVICES	0			0	0	0			0	1930	1930
0999	TOTAL OTHER PURCHASES	275289	0		8699	8142	292130	0		9038	32132	333300
9999	GRAND TOTAL	429284	0		12141	28520	468800	0		12806	25904	511144

NAVY
Medical Readiness Activities
Fiscal Year (FY) 2023 President's Budget

Expeditionary Health Services Systems Performance Criteria

IV. Performance Criteria and Evaluation Summary:

Fleet Hospital Inventory	FY 2021	FY 2022	FY 2023
Expeditionary Medical Support Facilities:			
Dollars (\$K)	\$21,205	\$13,490	\$13,790
150-bed units	8	8	8
Expeditionary Medical Units:			
Dollars (\$K)	\$4,094	\$4,000	\$4,776
10-bed units	4	4	4
Total Number of Beds	1,240	1,240	1,240
Forward Deployable Preventive Medicine Units (FDPMU):			
Dollars (\$K)	\$558	\$635	\$558
Units	4	4	4
SUBTOTAL	\$25,857	\$18,125	\$19,124
USNS MERCY/COMFORT			
Medical Equipment Replacement - Dollars (\$K)	\$1,963	\$3,712	\$3,785
SUBTOTAL	\$1,963	\$3,712	\$3,785
Below Threshold Reprogramming and Realignment Reporting System Action from other BSOs			
Shipboard Equipment Replacement Program (SERP) - Dollars (\$K)	\$1,993	\$0	\$0
Expeditionary Resuscitative Surgical System-Pacific (ERSS-P) - Dollars (\$K)	\$0	\$481	\$292
SUBTOTAL	\$1,993	\$481	\$292
Additional Navy Medical Support			
Navy Medicine Response in support of Coronavirus Disease 2019 (COVID-19) - Dollars (\$K)	\$0	\$0	\$0
Overseas Contingency Operations (OCO) supporting the Expeditionary Medical Unit (EMU) - Dollars (\$K)	\$2,322	\$0	\$0
Over the Horizon (OTH) supporting the Expeditionary Medical Unit (EMU) – Dollars (\$K)		\$2,420	\$2,466
SUBTOTAL	\$2,322	\$2,420	\$2,466
GRAND TOTAL	\$32,135	\$24,738	\$25,667

NAVY
Medical Readiness Activities
Fiscal Year (FY) 2023 President's Budget

Medical Activities Performance Criteria

IV. Performance Criteria and Evaluation Summary:

Drug Demand Reduction Program – Navy Military Drug Testing	FY 2021	FY 2022	FY 2023
Navy Specimens Tested	587,476		
Navy Recruit Specimens Tested	26,820		
Marine Corps Specimens Tested	386,589		
Marine Corps Recruit Specimens Tested	17,122		
Army Specimens Tested	32,657		
Army Reserves Specimens Tested	61,499		
Army National Guard Specimens Tested	42,637		
Air Force Specimens Tested	0		
Air Force Reserve Specimens Tested	0		
Air National Guard Specimens Tested	3		
Military Entrance Processing Station Specimens Tested	206,698		
Non DOD Specimens Tested	0		
US Coast Guard Specimens Tested	54		
Total Specimens Tested	1,361,555	0	0
Drug Demand Reduction Program Funding (\$K)	FY 2021	FY 2022	FY 2023
Drug Demand Reduction Program (DDRP) Funding	22,994		
Total	22,994	0	0
Operational Readiness Programs (\$K)	FY 2021	FY 2022	FY 2023
Operational Medicine	25,677	35,376	38,452
Force Medical Readiness	73,848	103,393	92,866
Fleet Programs	12,724	17,917	52,167
Operational Health Informatics	38,425	49,433	45,156
Enterprise Operations	7,013	25,239	24,784
Industrial Operations	15,944	18,773	20,237
Navy Readiness Reporting and Preparedness	10,624	12,405	11,270
SAPR	0	500	30
Total	184,255	263,036	284,962

NAVY
Medical Readiness Activities
Fiscal Year (FY) 2023 President's Budget

Administration Performance Criteria

IV. Performance Criteria and Evaluation Summary:

(\$K)	FY 2021	FY 2022	FY 2023
International Cooperative Administrative Support (ICASS)	732	717	732
Financial Improvement and Audit Readiness (FIAR)	1,042	923	953
Medical Headquarters	51,701	56,082	57,417
DOD Workforce Rationalization Plan Personnel	126	317	328
TOTAL	53,601	58,039	59,430

NAVY
Medical Readiness Activities
Fiscal Year (FY) 2023 President's Budget

Professional Development Education Performance Criteria

IV. Performance Criteria and Evaluation Summary:

<u>STUDENT WORKLOAD</u>	FY 2021	FY 2022	FY 2023
HPSP – Health Professions Scholarship Program	1,265	1,265	1,231
FAP – Financial Assistance Program	33	33	29
HPLRP – Health Professionals Loan Repayment Program	24	24	20
NCP - Nurse Candidate Program	85	85	72
GME – Graduate Medical Education	1,445	1,408	1,408
Other Professional Development	750	605	605
Service Specific Training	712	800	800
TOTAL ESTIMATED STUDENTS	4,314	4,220	4,165

Air Force
Medical Readiness Activities
Fiscal Year (FY) 2023 President's Budget

Description of Operations Financed:

MEDICAL READINESS: provides medical operational support tailored and designed to enhance the squadron's operational mission performance and the performance of individual Airmen through targeted, evidence-based interventions in mitigating risks and stressors within the workplace. It provides resources for Global Health Engagement and medical readiness programs above the Military Treatment Facility delivering critical support to the operational squadrons across the enterprise. Support includes En-Route Patient Staging, Human Performance Wing Aerospace Physiology & Centrifuge, and other operational medical requirements. Medical Operations also delivers aeromedical capabilities such as patient movement and necessary medical equipment requirements for the installation and/or mission with specific medical capabilities necessary to properly respond, identify casualties after an incident.

MEDICAL OPERATIONS SUPPORT: N/A

MEDICAL RESEARCH AND DEVELOPMENT: N/A

MEDICAL FACILITIES AND INSTALLATION SUPPORT: N/A

MEDICAL ACQUISITION SUPPORT: N/A

MEDICAL EDUCATION AND TRAINING: provides support for education and training opportunities for personnel through the following categories: Medical Readiness Exercises, Human Performance Wing programs, Air Force Institute of Technology medical officer scholarships and loans, Health Professions Scholarship Program, Uniformed Services University of the Health Sciences (USUHS), Professional Military Education, Continuing Medical Education, Functional Training, Long Term Health Education and Training, and Pre-Deployment Training.

**Air Force
Medical Readiness Activities
Fiscal Year (FY) 2023 President's Budget**

Financial Summary:

	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>
	<u>Actual</u>	<u>Enacted</u>	<u>Request</u>
TOTAL , BA 01: Operating Forces	0	0	0
TOTAL , BA 02: Mobilization	455,452	457,201	497,736
TOTAL , BA 03: Training and Recruiting	0	0	0
TOTAL , BA 04: Admin & Srvwide Activities	0	0	0
Total Medical Readiness Activities:	0	0	0

Details:

BA 02: Mobilization

Medical Operations Support

3400F 21D Mobilization Preparedness	455,452	307,686	337,586
Total Medical Operations Support	455,452	307,686	337,586

Medical Research and Development

	0	0	0
Total Medical Research and Development	0	0	0

Medical Facilities and Installation Support

	0	0	0
Total Medical Facilities and Installation Support	0	0	0

Medical Acquisition Support

	0	0	0
Total Medical Acquisition Support	0	0	0

Air Force
Medical Readiness Activities
Fiscal Year (FY) 2023 President's Budget

Medical Education and Training

SAG	21D	Mobilization Preparedness	0	149,515	160,150
			0	0	0
Total Medical Education and Training			0	149,515	160,150

Notes:

Medical Operations Support includes funding for Counter-Chemical, Biological, Radioactive, Nuclear, and high-yield Explosives (C-CBRNE); not part of transfer from DHP (FY21 \$11,199, FY22 \$14,461 FY23 \$14,885).

**Air Force
Medical Readiness Activities
Fiscal Year (FY) 2023 President's Budget**

Reconciliation of Increases and Decreases:

FY 2022 Enacted	\$457,201
1. Price Change.....	\$11,327
2. Transfers.....	(\$6,376)
a) Transfers In.....	\$0
b) Transfers Out.....	(\$6,376)
1) Civilian Pay - Defense Health Agency, Public Health Consolidation	(\$6,376)
Decrease transfer funding and manpower from Air Force Operations and Maintenance Mobilization Preparedness (SubActivity 21D, -\$6,376, 53 FTEs) to the Defense Health Agency. This action facilitates the DoD Public Health Consideration and the non-Medical Facilities transfer to the Defense Health Agency.	
3. Program Increases.....	\$35,584
1) Inflation Rate for Non-Pay and Non-Fuel Purchases	\$13,546
Increase allows Air Force Medical Readiness to continue to maintain a steady state of operations due to rising inflation rates as a result of continued supply chain and consumer demand on products and services.	
2) Federal Contractor Minimum Wage Increase	\$111
Additional funding to address the estimated impacted of Executive Order (E.O.) 14026, Increasing the Minimum Wage for Federal Contractors, dated April 27, 2021. E.O. 14026, Section 4(a_ requires the Department of Labor to implement regulations to increase the minimum wage to \$15 per hour by January 30, 2022, on contracts by the Fair Labor Standards Act, the Service Contract Act (SCA), or the Davis Bacon Act (DBA). The E.O. also applies only to Federal Contractors and Subcontractors on new contract actions entered into on or after January 30,2022.	
3) COVID-19 Testing (COVID Task Force)	\$1,250
4) AF Medial Readiness Transportation	\$2,588
Increase for Medical-Dental WRM provides supplies and equipment vital to support forces for the first 30 days of a contingency	

**Air Force
Medical Readiness Activities
Fiscal Year (FY) 2023 President's Budget**

operation and provides force health protection materiel to all deploying TFI personnel.

5) Civilian Pay - Medical Readiness \$7,836
 Increase provides half-year funding and manpower in Base Support (Subactivity Group 11Z, +2,225, 14 FTE), Mobilization Preparedness (Subactivity 021D, +7,836, 103 FTEs), Administration (Subactivity Group 42A, \$1,859, 29 FTEs) to support medical contingency positions to maintain the right workforce balance at the lowest cost.

6) Civilian Pay - Average Workyear Cost Adjustment \$10,253
 Increase in civilian personnel compensation reflects adjusted average workyear cost. Each year Air Force uses detailed execution and cost factor analysis to update civilian compensation cost for the purpose of accurately forecasting budget estimates for the civilian workforce.

3. Program Decreases.....	\$0
FY 2023 Budget Request.....	\$497,736

Air Force
Medical Readiness Activities
Fiscal Year (FY) 2023 President's Budget

Performance Criteria and Evaluation Summary:

	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>
1) Medical Readiness¹			
Medically Ready to Deploy ²	205,350	234,906	235,696
Dentally Ready to Deploy ³	243,846	245,646	250,906
	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>
2) Medical Education and Training			
Health Profession Scholarship	1,440	1,487	1,440
Officer/Enlisted Primary Training	-	-	-
Other Training - Medical Function Training ¹	7,319	9,618	10,618

Notes:

1) ¹Data Source: Aeromedical Services Information Management System (ASIMS) DoD Balanced Scorecard

²Medically Ready to Deploy includes all active duty military that are medically cleared to deploy (PHA, immunizations, labs, profiles).

³Dentally Ready to Deploy includes all active duty military that are classified as Dental Class I or 2.

2) ¹Other Training includes leadership and skills progression courses as well as professional development training.

Air Force
Medical Readiness Activities
Fiscal Year (FY) 2023 President's Budget

Personnel Summary: Total

	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Change</u> <u>FY 2022/2023</u>
<u>Active Military End Strength (E/S) (Total)</u>	0	0	0	0
Officer	0	0	0	0
Enlisted	0	0	0	0
<u>Active Military Average Strength (A/S) (Total)</u>	0	0	0	0
Officer	0	0	0	0
Enlisted	0	0	0	0
<u>Civilian FTEs (Total)</u>	0	0	0	0
<u>DIRECT FUNDED (DOES NOT INCLUDE MILITARY TECHNICIANS)</u>	0	0	0	0
U.S. Direct Hire	578	599	649	50
Foreign National Direct Hire	6	0	0	0
Total Direct Hire	584	599	649	50
Foreign National Indirect Hire	0	0	0	0
<u>REIMBURSABLE FUNDED</u>	0	0	0	0
U.S. Direct Hire	0	0	0	0
Foreign National Direct Hire	0	0	0	0
Total Direct Hire	0	0	0	0
Foreign National Indirect Hire	0	0	0	0
<u>Annual Civilian Salary Cost</u>	134	102	113	0
<u>Contractor FTEs (Total)</u>	0	0	0	0

Air Force
Medical Readiness Activities
Fiscal Year (FY) 2023 President's Budget

OP-32A Line Items: Total

	FY 2021	FC Rate	Price	Price	Program	FY 2022	FC Rate	Price	Price	Program	FY 2023	
	Program	Diff	Growth	Growth	Growth	Program	Diff	Growth	Growth	Growth	Program	
			Percent					Percent				
<u>CIVILIAN PERSONNEL COMPENSATION</u>												
0101	EXECUTIVE, GENERAL AND SPECIAL SCHEDULES	\$ 77,187.0	\$ 5.0	2.3%	\$ 1,775	\$ (17,945)	\$ 61,022	\$ -	4.1%	\$ 2,502	\$ 9,995	\$ 73,519
0103	WAGE BOARD	\$ 909.0	\$ -	2.3%	\$ 21	\$ (930)	\$ -	0.0%	\$ -	\$ -	\$ -	\$ -
0104	FOREIGN NATIONAL DIRECT HIRE (FNDH)	\$ 60.0	\$ -	2.3%	\$ 1	\$ (61)	\$ -	0.0%	\$ -	\$ -	\$ -	\$ -
0107	VOLUNTARY SEPERATION INCENTIVE PAY	\$ 40.0	\$ -	2.3%	\$ 1	\$ (41)	\$ -	0.0%	\$ -	\$ -	\$ -	\$ -
0110	UNEMPLOYMENT COMPENSATION	\$ -	\$ -	0.0%	\$ -	\$ 14	\$ 14	\$ -	4.1%	\$ 1	\$ (1)	\$ 14
0199	TOTAL CIVILIAN PERSONNEL COMPENSATION	\$ 78,196.0	\$ 5.0		\$ 1,798	\$ (18,963)	\$ 61,036	\$ -		\$ 2,503	\$ 9,994	\$ 73,533
<u>TRAVEL</u>												
0308	TRAVEL OF PERSONS	\$ 15,540	\$ 203	3.0%	\$ 472	\$ (15,314)	\$ 901	\$ -	2.1%	\$ 19	\$ 140	\$ 1,060
0399	TOTAL TRAVEL	\$ 15,540	\$ 203		\$ 472	\$ (15,314)	\$ 901	\$ -		\$ 19	\$ 140	\$ 1,060
<u>DEFENSE WORKING CAPITAL FUND SUPPLIES AND MATERIALS</u>												
0401	DLA ENERGY (FUEL PRODUCTS)	\$ 5	\$ -	30.0%	\$ 2	\$ (7)	\$ -	\$ -	0	\$ -	\$ -	\$ -
0414	AF CONSOLIDATED SUSTAINMENT	\$ 51	\$ -	2.9%	\$ 1	\$ (52)	\$ -	\$ -	0	\$ -	\$ -	\$ -
0418	AF RETAIL SUPPLY	\$ 26,035	\$ -	2.5%	\$ 651	\$ (20,355)	\$ 6,331	\$ -	7.0%	\$ 443	\$ (332)	\$ 6,442
0499	TOTAL SUPPLIES AND MATERIALS PURCHASES	\$ 26,091	\$ -		\$ 654	\$ (20,414)	\$ 6,331	\$ -		\$ 443	\$ (332)	\$ 6,442
<u>DEFENSE WORKING CAPITAL FUND EQUIPMENT PURCHASES</u>												
0505	AIR FORCE FUND EQUIPMENT	\$ 26,943	\$ -	2.6%	\$ 701	\$ (22,821)	\$ 4,823	\$ -	5.7%	\$ 275	\$ (178)	\$ 4,920
0599	TOTAL STOCK FUND EQUIPMENT PURCHASES	\$ 26,943	\$ -		\$ 701	\$ (22,821)	\$ 4,823	\$ -		\$ 275	\$ (178)	\$ 4,920
<u>OTHER PURCHASES</u>												
0647	DISA ENTERPRISE COMPUTING CENTERS	\$ -	\$ -	0.0%	\$ -	\$ -	\$ -	\$ -	0.0%	\$ -	\$ -	\$ -
0671	DISA DISN SUBSCRIPTION SERVICES	\$ 148	\$ -	7.6%	\$ 11	\$ (159)	\$ -	\$ -	0.0%	\$ -	\$ -	\$ -
0679	COST REIMBURSABLE PURCHASE	\$ 34	\$ -	0.0%	\$ -	\$ (34)	\$ -	\$ -	0.0%	\$ -	\$ -	\$ -
0703	JCS EXERCISE	\$ 30,796	\$ -	-0.9%	\$ (277)	\$ (30,519)	\$ -	\$ -	0.0%	\$ -	\$ -	\$ -
0705	AMC TRAINING	\$ 702	\$ -	5.4%	\$ 38	\$ (740)	\$ -	\$ -	0.0%	\$ -	\$ -	\$ -
0771	COMMERCIAL TRANSPORTATION	\$ 1,191	\$ -	3.0%	\$ 36	\$ (809)	\$ 418	\$ -	2.1%	\$ 9	\$ -	\$ 427
0913	PURCHASED UTILITIES (NON-DWCF)	\$ 1,473	\$ -	3.0%	\$ 44	\$ (1,517)	\$ -	\$ -	0.0%	\$ -	\$ -	\$ -
0914	PURCHASED COMMUNICATIONS (NON-DWCF)	\$ 1,238	\$ -	3.0%	\$ 37	\$ (1,275)	\$ -	\$ -	0.0%	\$ -	\$ -	\$ -
0915	RENTS (NON-GSA)	\$ 3,467	\$ -	3.0%	\$ 104	\$ (3,571)	\$ -	\$ -	0.0%	\$ -	\$ -	\$ -
0917	POSTAL SERVICES (U.S.P.S)	\$ 228	\$ -	3.0%	\$ 7	\$ (235)	\$ -	\$ -	0.0%	\$ -	\$ -	\$ -
0920	SUPPLIES AND MATERIALS (NON-DWCF)	\$ 8,237	\$ -	3.0%	\$ 247	\$ (8,112)	\$ 372	\$ -	2.1%	\$ 8	\$ (74)	\$ 306
0921	PRINTING AND REPRODUCTION	\$ 44	\$ -	3.0%	\$ 1	\$ (45)	\$ -	\$ -	0.0%	\$ -	\$ -	\$ -
0922	EQUIPMENT MAINTENANCE BY CONTRACT	\$ 29,670	\$ -	3.0%	\$ 890	\$ (27,019)	\$ 3,541	\$ -	2.1%	\$ 74	\$ 56	\$ 3,671
0923	FACILITY SUSTAIN, RESTORE MOD BY CT	\$ 4,284	\$ -	3.0%	\$ 129	\$ (3,942)	\$ 471	\$ -	2.1%	\$ 10	\$ 26	\$ 507
0925	EQUIPMENT PURCHASES (NON-FUND)	\$ 5,228	\$ -	3.0%	\$ 157	\$ 2,559	\$ 7,944	\$ -	2.1%	\$ 167	\$ 8	\$ 8,119
0932	MANAGEMENT AND PROFESSIONAL SUPPORT SERVICES	\$ 2,866	\$ -	3.0%	\$ 86	\$ (2,952)	\$ -	\$ -	0.0%	\$ -	\$ -	\$ -
0933	STUDIES, ANALYSIS, AND EVALUATIONS	\$ 11,156	\$ -	3.0%	\$ 335	\$ (11,491)	\$ -	\$ -	0.0%	\$ -	\$ -	\$ -
0934	ENGINEERING AND TECHNICAL SERVICES	\$ 1,442	\$ -	3.0%	\$ 43	\$ (1,485)	\$ -	\$ -	0.0%	\$ -	\$ -	\$ -
0935	TRAINING AND LEADERSHIP DEVELOPMENT (OTHER CONTR)	\$ 96,453	\$ -	3.0%	\$ 2,894	\$ 269,356	\$ 368,703	\$ -	2.1%	\$ 7,743	\$ 18,136	\$ 394,582
0955	MEDICAL CARE	\$ 87,149	\$ -	4.1%	\$ 3,573	\$ (89,587)	\$ 1,135	\$ -	4.0%	\$ 45	\$ 43	\$ 1,223
0957	LAND AND STRUCTURES	\$ 1,052	\$ -	3.0%	\$ 32	\$ (1,084)	\$ -	\$ -	0.0%	\$ -	\$ -	\$ -
0964	OTHER COSTS-SUBSIST SUPT OF PERS	\$ 1,082	\$ -	3.0%	\$ 32	\$ (1,114)	\$ -	\$ -	0.0%	\$ -	\$ -	\$ -
0985	RESEARCH AND DEVELOPMENT CONTRACTS	\$ 28	\$ -	0.0%	\$ -	\$ (28)	\$ -	\$ -	0.0%	\$ -	\$ -	\$ -
0987	OTHER INTRA-GOVERNMENT PURCHASES	\$ 2	\$ -	3.0%	\$ -	\$ 1,525	\$ 1,527	\$ -	2.1%	\$ 32	\$ 60	\$ 1,619
0989	OTHER SERVICES	\$ 20,712	\$ -	3.0%	\$ 621	\$ (21,334)	\$ (1)	\$ -	2.1%	\$ -	\$ 1,328	\$ 1,327
0999	TOTAL OTHER PURCHASES	\$ 308,682	\$ -		\$ 9,040	\$ 66,388	\$ 384,110	\$ -		\$ 8,088	\$ 19,583	\$ 411,781
9999	GRAND TOTAL	\$ 455,452	\$ 208		\$ 12,665	\$ (11,124)	\$ 457,201	\$ -		\$ 11,328	\$ 29,207	\$ 497,736

