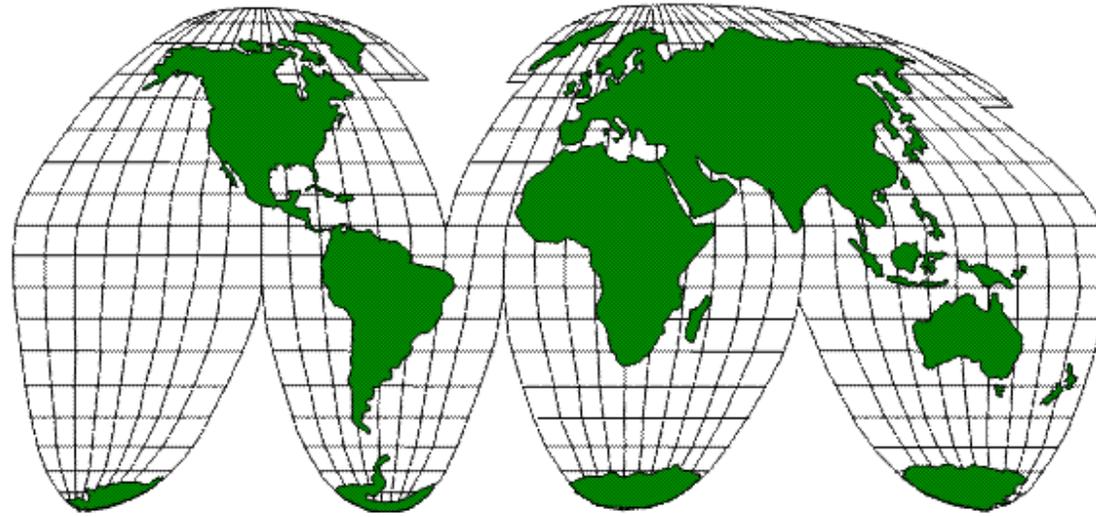


May 26, 2021

DEFENSE HEALTH PROGRAM

Department of Defense
OFFICE OF PREPUBLICATION AND SECURITY REVIEW



Fiscal Year (FY) 2022 Budget Estimates

OPERATION AND MAINTENANCE

PROCUREMENT

RESEARCH, DEVELOPMENT, TEST AND EVALUATION

Volume 1: Justification Estimates

Volume 2: Data Book

May 2021

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 \$1,260,000 in FY 2021

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(\$ in Millions)

<u>Appropriation Summary:</u>	<u>FY 2020¹ Actuals</u>	<u>Price Growth</u>	<u>Program Growth</u>	<u>FY 2021² Estimate</u>	<u>Price Growth</u>	<u>Program Growth</u>	<u>FY 2022³ Estimate</u>
Operation & Maintenance ⁴	32,963.9	1,012.7	-2,211.9	31,764.7	1,024.8	1,393.2	34,182.7
RDT&E	3,657.9	10.8	-1,276.1	2,392.6	13.1	-1,775.0	630.7
Procurement	<u>476.4</u>	<u>13.8</u>	<u>54.2</u>	<u>544.4</u>	<u>14.2</u>	<u>220.4</u>	<u>779.0</u>
Total, DHP	37,098.2	1,037.3	-3,433.8	34,701.7	1,052.1	-161.4	35,592.4
MERHCF Receipts	<u>10,570.1</u>			<u>11,347.7</u>			<u>11,958.1</u>
Total Health Care Costs	47,668.3			46,049.4			47,550.5

^{1/} FY 2020 actuals includes \$3.466 billion for CARES, \$347.535 million for OCO, \$10.0 million for Fisher House, and excludes funds transferred to VA for Lovell FHCC and the Joint Incentive Fund (\$141.865 million)

^{2/} FY 2021 estimate includes \$365.098 million for OCO, includes \$650.245 million fact-of-life increase attributed to COVID-19 Pandemic healthcare claims in Private Sector Care, and includes \$10.0 million for Fisher House, \$137 million for transfer to VA for Lovell FHCC, and \$15 million for transfer to Joint Incentive Fund.

^{3/} FY 2022 request includes \$251.851 million for Direct War Funding, \$429.415 for continued COVID-19 Pandemic response and includes \$137 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, veterinary services, occupational and industrial health care, specialized services for the training of medical personnel, and medical command headquarters. 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. In FY 2022 and beyond, 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 2022 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. The FY 2022 Budget continues the Department's efforts to develop and employ cost containment strategies, while addressing delays in planned reform efforts in the FY 2021 budget due to COVID-19 impacts to transition plans. For FY 2022, our efforts will focus on additional business reforms and process re-engineering as we continue to examine the impacts of recently implemented reforms. To support these efforts, the Defense Health Agency will stand-up a Picture Archiving and Communication (PACS) office to ensure sufficient staffing and process standardization are in place to realize identified savings. Additionally, the DHA will achieve savings by establishing a unified Medical Logistics Enterprise Activity to leverage best practices and limit variation in logistical support to the Military Treatment Facilities (MTFs) for non-drug supplies, equipment and services. The aforementioned initiatives, along with others focused on Access and Revenue Cycle Management, will continue to ensure the organization is optimizing the best use of the Department's resources.

Private Sector Care continues to be a vital part of the Military Health System in FY 2022 and represents roughly 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 masked underlying increases in health care costs, which is estimated to have saved \$3.5 billion over a six year period. Starting in FY 2019, cost patterns returned to normal growth rate related to normal price inflation, an increase in beneficiaries, new benefits (e.g., urgent care visit requiring no referral), and a small increase in utilization of some services. At the start of FY 2020, those growth trends were continuing until the COVID-19 pandemic significantly reduced the utilization of health care service beginning in March of 2020. The suppression of care due to beneficiaries delaying or deferring care appears to be returning to more normal levels in FY 2021, while we

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address higher healthcare costs associated with the on-going COVID-19 pandemic. As multiple reform efforts continue within the Military Health System, Private Sector Care will continue to represent an important part of the overall health system in FY 2022.

The DoD and the Department of Veteran's Affairs continue to progress in the establishment of the unified Electronic Health Record. In FY 2022, 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 2022 budget continues the deployment of MHS GENESIS, the Department's Electronic Health Record. The FY 2022 expansion to Waves BAMC, LACKLAND, HOOD, BRAGG, BEAUMONT, GORDON, JACKSONVILLE, and EGLIN. MHS GENESIS will also be deploying RevX the accounting system for MHS GENESIS for all facilities that have or will have MHS GENESIS deployed during FY 2022. 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 the deployments that have been done to date. In addition the following waves will begin pre-deployment activities in FY 2022, Waves PORTSMOUTH, DRUM, WALTER REED, BELVOIR, and WRIGHT-PATTERSON. 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 DHP appropriation 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 repairable items; and MHS information technology (IT) requirements.

Narrative Explanation of FY 2021 and FY 2022 Operation and Maintenance (O&M) Changes:

The DHP O&M funding reflects an overall increase of \$2,418.0 million between FY 2021 and FY 2022, consisting of \$1,024.8 million in price growth and a net program increase of \$1,393.2 million. \$251.9 million for Direct War Costs accounted for in the Base Budget, supporting the following programs: 1) pre/post deployment activities for all deploying and returning soldier, 2) Reserve Component (RC) personnel and their family members with healthcare, pharmacy and dental benefits, and 3) requirements directly supporting 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.

Program **increases** include:

- \$606.0 million required Private Sector Care to support continued COVID-19 testing and vaccine booster

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- \$272.8 million for increase in requirements in the In-House Care Budget Activity Group to fund COVID-19 testing (+\$202.8 million) and vaccine boosters (+\$70.0 million) to support the Administration's priorities to move quickly to contain the COVID-19 Pandemic and inoculate the United States population efficiently and equitably
- \$191.4 million for increase to Private Sector Care (PSC) baseline attributed to National Health Expenditure (NHE) inflationary growth of 4.97% applied to the FY 2021 estimate for healthcare projected for FY 2022
- \$146.6 million funds requirements for expanded Public Health Surveillance for expanded contact tracing testing and screening and continued efforts to identify variants to prevent the further spread of COVID-19
- \$104.5 million required to provide funding for civilian full-time equivalents (FTEs) and contractor FTEs to ensure uninterrupted access to timely, high-quality healthcare as the Department redirects uniformed manpower toward more direct warfighting functions
- \$96.7 million for fact-of-life delays associated with implementing three elements of medical business reforms identified in the Defense Wide Review 1.0 and which were included in the PB 2021 submission; fact-of-life events to include the COVID-19 pandemic delayed implementation of the reform efforts and require an adjustment to the timing of the savings estimates.
- \$69.6 million for increased estimate for Continuing Health Education/Capitalization of Assets Program based on estimated increase in in-patient workload assumed in the Private Sector Care program
- \$66.6 million continues funding the Military Treatment Facilities (MTFs) Information Management/Information Technology (IM/IT) and Defense Health Agency IT Infrastructure ongoing operating costs
- \$51.1 million for civilian personnel costs to reflect the revised Federal Employee Retirement System (FERS) Agency Contribution for FY 2022 in accordance with Office of Management and Budget (OMB) Circular No. A-11
- \$50.6 million continues funding the MHS GENESIS Electronic Health Record (EHR) deployment in accordance with the DoD Healthcare Management System (DHMS) Program Executive Office's (PEO) updated deployment schedule and the Continued Fielding Acquisition Decision Memorandum (ADM) from the Assistant Secretary of Defense, Acquisition (ASD(A))
- \$39.1 million for the FY 2022 civilian personnel awards budget at the aggregate level for General Schedule (GS) and Wage Grade (WG) employees in accordance with the Office of Management and Budget (OMB) Circular No. A-11 direction to increase civilian awards spending by no less than one (1) percentage point of FY 2020 GS and WG salary spending
- \$37.0 million for increases to pharmaceutical requirements in order to better align actual budget execution with programming
- \$21.7 million required to fund civilian personnel costs for the net effect of the Civilian Pay Raise Assumptions which was increased from 1.0% to 2.7%
- \$9.0 million for the purchase of supplies and materials, equipment, contracts, and printing and reproduction for Education and Training operations at the Defense Health Agency's activities
- \$7.5 million for projected increase in requirements in Consolidated Health Support Budget Activity Group; funds support increased hazard exposure surveillance and training requirements; increased supply costs associated with the operation of 20 blood centers to include blood typing anti-sera and other testing reagents, donor unit collection bags shipping containers and other consumable supplies required in the production of blood products; as well as increased contract provider support needed to augment the GS/MIL performing disability evaluation physicals
- \$6.9 million required to fund the incremental increase for the expansion of the Military Health System (MHS) Virtual Health Program, which synchronizes, standardizes, and coordinates virtual medical services across the Department of Defense that support remote, clinical, operational and garrison forces
- \$4.5 million required for Foreign Currency Fluctuation Rates; projected change in the value of the U.S. dollar based on the 6-month historical weekly rates

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- \$3.5 million realigned to DHP Operation and Maintenance, Private Sector Care (+\$3,498K) from DHP Research, Development, Test & Evaluation (RDT&E) for E-Commerce sustainment.
- \$3.4 million for the administrative fees associated with the Overseas Health Care that was reduced in FY 2021 in error
- \$2.1 million realigns Information Management/Information Technology (IM/IT) funding to Defense Health Agency, Operations and Maintenance, IM/IT, Tri-Service IM/IT program element (\$2,128K) from Research, Development, Test, and Evaluation to account for the budgeting and execution of Air Force Medical Information System Test Bed at the Defense Health Agency
- \$1.1 million transfers remaining funding for the Operation Live Well (OLW) Initiative from the Office of the Under Secretary of Defense for Personnel and Readiness (OUSD P & R) to the Defense Health Agency's Public Health Division

Program **decreases** include:

- \$219.7 million reduction in requirements in the In-House Care, Consolidated Health Support, Management Activities, Education and Training, and Base Operations and Communications Budget Activity Groups through the Military Health System enterprise-wide efforts to consolidate contracts and increase contract standardization
- \$79.4 million reduction in Private Sector Care Pharmaceutical Drugs to account for increase in Pharmaceutical copay levels set in January of 2020, which are to begin January 2022
- \$44.7 million adjustment due to FY 2021 one-time increases for the following efforts: suicide prevention, Health Professions Scholarship Programing (HPSP) and Natural Disaster Recovery funding which was issued for Initial Outfitting requirements to support MILCON associated with 2017 Hurricane Disasters
- \$22.6 million reduces the Desktop to Datacenter (D2D) funding required for information technology (IT) sustainment, infrastructure maintenance, and enterprise support services for the Military Health System (MHS) centrally managed IT systems worldwide; also reduces funding for the Service Medical Information Management/Information Technology (IM/IT) FTES (-29FTEs;-\$2,380K) and contracts (\$3,217K) through consolidation of IM/IT services at the Defense Health Agency and continues the reduction to the Cybersecurity program as program matures beyond initial actions to establish the program and baseline
- \$8.0 million reduction in resources for FY 2022 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 Private Sector Care (PSC) charges and execute these funds in the Defense Health Program (DHP) appropriation.
- \$7.0 million realignment of funds from Defense Health Program, Operations and Maintenance, Base Operations (-\$7,000K) to Research, Development Test and Evaluation (+\$4,000K) and Procurement (+3,000K) for continued development of the Defense Health Program Financial Management System, General Fund Enterprise Business System
- \$5.8 million decrease continues the implementation of the Military Health System organizational reforms required by the National Defense Authorization Acts of FY 2017 and FY 2019 focused on efforts to reduce redundant and unnecessary headquarters overhead while building a structure that drives improved outcomes for readiness, health, quality and cost
- \$5.7 million due to healthcare requirements reduction associated the reduction of Active Army end strength projection for FY 2022
- \$5.6 million transfers Other Education and Training program element funds from the Defense Health Program (DHP) to the Department of the Army to correct an error made during the FY 2021 President's Budget when calculating the amount transferred to Operations and Maintenance, Army (OMA) for the Medical Simulations program

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Continuing in FY 2022, the Department projects that up to \$137 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 2022, 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.

Narrative Explanation of FY 2021 and FY 2022 Research Development Test & Evaluation (RDT&E) Changes:

The DHP RDT&E Program reflects a net decrease of \$1,761.9 million between FY 2021 and FY 2022. This includes a price growth of \$13.1 million and a program decrease of \$1,775.0 million.

Program **increases** include:

- \$52.9 million increase associated with the realignment of the Joint Operational Medicine Information Systems (JOMIS) and Theater Medical Information Program - Joint (TMIP-J) funding from the Software & Digital Technology Budget Activity created in FY21 back to the Research, Development, Test & Evaluation (RDT&E) Budget Activity.
- \$15.0 million increase associated with support of COVID vaccine capabilities and wearables.
- \$7.1 million increase for Medical Products Support and Advanced Concept Development due to increases in Medical Simulation and Training, Medical Readiness and Medical Combat Support capability improvements through clinical and field validation studies, prototyping, risk reduction, and product transition efforts for medical information technology applications.
- \$5.0 million restoral for Advanced Modeling and Simulation.
- \$4.0 million increase due to support of the GFEBS Deployment to support the Investment 1.0: SAP Licenses/HANA/Site Activation/Deployment Hardware/SI Pre-Deployment/Deployment/Post-Deployment On-Site Support.

Program **decreases** include:

- \$1,667.2 million decrease due to FY 2021 one-time Congressional adjustments to include congressional special interest items
- \$163.5 million decrease based on the realignment of the Software & Digital Technology Budget Activity back to Joint Operational Medicine Information Systems (JOMIS) RDT&E Budget Activity and Operational and Maintenance Budget Activity.
- \$15.5 million decrease associated with the restoral for the National Disaster Medical System (NDMS) Medical Surge Pilot.
- \$5.8 million decrease due to newly approved Acquisition Strategy to acquire solutions to modernize, deploy, and sustain the Department of Defense's (DoD) Operational Medicine (OpMed) Information Systems (IS) capabilities. This includes the execution of Healthcare Delivery development plan which including development of MHS GENESIS-Theater, Health Assessment Lite Operations (HALO), and Theater Blood Management system; as well as initiate development of Operational Medicine Data Service.

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- \$3.5 million decrease for E-Commerce due to a funding transfer from RDT&E Budget Activity to O&M Budget Activity starting in FY22. Development activities are planned for completion in FY21. Funding re-aligned to O&M will support sustainment of completed development activities.
- \$3.5 million decrease associated with scaling back efforts towards Combat Causality Care and Clinical and Rehabilitation Medicine.

Narrative Explanation of FY 2021 and FY 2022 Procurement Changes:

The DHP Procurement Program has a net increase of \$234.6 million between FY 2021 and FY 2022. This includes price growth of \$14.2 million and a net program increase of \$220.4 million.

Program **increases** include:

- \$198.7 million increase to DoD Healthcare Management System Modernization (DHMSM) to align with the MHS GENESIS deployment schedule (Continued Acquisition Decision Memorandum (ADM) from the Assistant Secretary of Defense, Acquisition (ASD(A)) signed on Oct. 30, 2020). The funding deployment activities include site visits, localized configuration, and on-site deployment support.
- \$16.9 million increase to support replacement of medical equipment to include Medical/Surgical, Preventive Medicine/Pharmacy, and Radiographic across the Military Health System.
- \$7.7 million increase for the Wide Area Virtual Environment (WAVE) system at Uniformed Services University of the Health Sciences. The WAVE plays a central role in the University's medical training and education mission and these funds support critical equipment upgrades to ensure the continued operation of the system.
- \$3.2 million increase in support DML-ES project for compute and storage hosting architecture associated with LogiCole and the refreshed Defense Medical Logistics Standard Support (DMLSS) environment. This will combine all the legacy MEDLOG applications (DMLSS, Theater Enterprise Wide Medical Logistics System (TEWLS), and Joint Medical Asset Repository (JMAR)) into a single environment.
- \$3.0 million increase for the General Fund Enterprise Business System (GFEBS) hardware and storage purchases planned for FY 2022.

Program **decreases** include:

- \$3.8 million decrease for Legacy Data Repository (LDR) requirements due to hardware purchases being completed with FY21 funds.
- \$2.6 million decrease to initial facility outfitting requirements based on a shift of facility projects.
- \$2.7 million decrease to Joint Operational Medicine Information Systems (JOMIS) program in FY22 to align procurement requirements with the new JOMIS Acquisition Strategy signed by Milestone Decision Authority (MDA) signed Jan 2021. Procurement funds are not required to support the program in FY 2022.

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.

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- **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.

Output related measures that influence Medical Cost Per Member Per Year:

- **Inpatient Production Target** (Medicare Severity Adjusted Relative Weighted Products, referred to as MS-RWPs) – Achieving the production targets ensures that the initial plan for allocation of personnel and resources are used appropriately in the production of inpatient workload.
- **Outpatient Production Target** (Relative Value Units, referred to as RVUs) – Achieving the production targets ensures that the initial plans for allocation of personnel and resources are used appropriately in the production of outpatient workload.

Below is reporting for FY 2020 performance measures related to the Quadruple Aim, and two output measures related to production plan targets. Performance various greatly 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 is expected to experience continued impacts during FY 2021 as the MHS supports the Federal Emergency Management Agency (FEMA) in administering COVID-19 vaccinations at community vaccination centers around the country. The overall success of each measured is discussed below:

- **Individual Medical Readiness** – The MHS achieved the goal for the Active Component Force Medical Readiness through the 3rd quarter of FY 2020. With all of the issues surrounding the associated force health protection guidance for COVID-19, delays existed with updating of the Periodic Health Assessment (PHA). Initial guidance allowed for a one-time extension of the deadlines for updating the PHA, but even those revised timelines were impacted by COVID-19. Since the PHA is a screening tool used by the Services to evaluate the individual medical readiness of their Service members, additional details for any outstanding Deployment-Limiting Medical Conditions may not be addressed until later this fiscal year. Issues should be resolved during this fiscal year, with the goal achieved by the end of FY 2021.

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- **Beneficiary Satisfaction with Health Plan** – Satisfaction with Health Care Plan performance for FY 2020 was 63%, which exceeded the goal of 57 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 at the beginning of the COVID-19 period from MTF Prime enrollees, but the scores recovered later in the year. It appears that restricted access at the MTFs related to force health protections during the initial COVID-19 periods drove part of the decrease. Once the online access to care was better established with MTF PCMs and access to the MTFs improved, the 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 following three measures and the goals have been adjusted accordingly for the two production measures related to Inpatient and Outpatient Care.**
- **Medical Cost Per Member Per Year – Annual Cost Growth** – The Year to Date performance estimate for FY 2020 is negative 3.5% percent vs goal of 4.9 percent growth. As claims mature, there may be slight changes in the performance levels. 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. As the system returns to normal during the next couple of years, performance is expected to return to more normal levels of growth.
- **Inpatient Production Target (MS-RWPs)** – Due to impact of COVID-19 and the force health protections guidelines, the MHS only managed to achieve 92% of the Inpatient workload of the prior fiscal year. Based on access restrictions to the MTFs for an extended period of time during FY2020, this level of performance represent significant effort from the MTFs to provide quality health care service to MHS beneficiaries during the pandemic. Overall, once the impacts related to COVID-19 are eliminated, performance should return to normal with a growth in workload.
- **Outpatient Production Target (RVUs)** – Due to the impact of COVID-19, force health protections guidelines, and significant deployments of MTF personnel in support of FEMA operations across the United States, the MHS did not achieve the performance levels for this measure. The MHS only managed to achieve 80% of the workload produced in the prior fiscal year. While the workload decrease was expected due to all the external factors in place during the year, significant progress was achieved on expansion of tele-health services to MHS beneficiaries. Overall performance should improve once the impacts from the pandemic are eliminated. For FY 2021, reductions in care are also expected based on support to FEMA health care requirements and the administration of the COVID-19 vaccinations at community vaccination centers around the country.

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**Defense Health Program
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Funding by Budget Activity**

(Dollars in Thousands)

0130D Defense Health Program	FY 2020^{1/}	FY 2021^{2/}	FY 2022^{3/}
	<u>Base + OCO</u>	<u>Enacted</u>	<u>Request</u>
		<u>Total</u>	<u>Base</u>
<u>BUDGET ACTIVITY 01: OPERATION & MAINTENANCE</u>			
0130D 010 In-House Care	9,838,080	9,073,423	9,720,004
0130D 020 Private Sector Care	15,906,696	16,008,365	18,092,679
0130D 030 Consolidated Health Support	2,027,851	1,337,067	1,541,122
0130D 040 Information Management	2,168,707	2,089,039	2,233,677
0130D 050 Management Activities	300,056	330,627	335,138
0130D 060 Education and Training	746,800	335,685	333,234
0130D 070 Base Operations/Communications	1,975,718	1,940,210	1,926,865
TOTAL, BA 01: OPERATION & MAINTENANCE	32,963,908	31,114,416	34,182,719
<u>BUDGET ACTIVITY 02: RDT&E</u>			
0130D DEFENSE HEALTH PROGRAM	3,657,995	2,392,579	630,680
TOTAL, BA 02: RDT&E	3,657,995	2,392,579	630,680
<u>BUDGET ACTIVITY 03: PROCUREMENT</u>			
0130D DEFENSE HEALTH PROGRAM	476,359	544,369	779,008
TOTAL, BA 03: PROCUREMENT	476,359	544,369	779,008
Total Defense Health Program	37,098,262	34,051,364	35,592,407

1/ FY 2020 Actuals includes Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 (P.L. 116-94) \$347.535 million, Coronavirus Aid, Relief, and Economic Security Act (P.L.116-136) \$3.466 billion, Fisher House \$10.000M.

2/ FY 2021 reflects enactment and includes Division C, Title IX and Division J, Title IV of the Consolidated Appropriations Act, 2021 (P.L. 116-260) \$365.098M for OCO, transfers to FHCC (\$137 million), Fisher House (\$10.0 million) and JIF (\$15.0 million). Also includes -\$8.3 million adjustment for foreign currency.

3/ FY 2022 includes \$251.9 million for Direct War Costs and \$429.4 million for continued COVID-19 Pandemic response.

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**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2022 Budget Estimates
Summary of Price and Program Growth**

		<u>FY 2020 Program</u>	<u>Price Growth Percent</u>	<u>Price Growth</u>	<u>Program Growth</u>	<u>FY 2021 Program</u>	<u>Price Growth Percent</u>	<u>Price Growth</u>	<u>Program Growth</u>	<u>FY 2022 Program</u>
0101	EXEC, GEN'L & SPEC SCHEDS	6,201,319	1.54%	95,500	-424,888	5,871,931	2.27%	133,293	97,358	6,102,582
0103	WAGE BOARD	136,513	1.54%	2,102	-6,294	132,321	2.27%	3,004	18,905	154,230
0104	FN DIRECT HIRE (FNDH)	53,313	1.54%	821	-13,848	40,286	2.27%	914	1,320	42,520
0105	SEPARATION LIABILITY (FNDH)	1,547	1.54%	24	-24	1,547	2.27%	35	-35	1,547
0106	BENEFIT TO FMR EMPLOYEES	0	0.00%	0	0	0	0.00%	0	1	1
0107	VOLUNTARY SEP INCENTIVES	923	1.54%	14	422	1,359	2.27%	31	-32	1,358
0110	UNEMPLOYMENT COMPENSATION	0	0.00%	0	0	0	0.00%	0	5,830	5,830
0121	PCS BENEFITS	11	1.54%	0	-11	0	0.00%	0	0	0
	TOTAL CIVILIAN PERSONNEL COMPENSATION	6,393,626		98,462	-444,644	6,047,444		137,277	123,347	6,308,068
0308	TRAVEL OF PERSONS	135,919	2.00%	2,718	-10,537	128,100	1.90%	2,434	-3,076	127,458
	TOTAL TRAVEL	135,919		2,718	-10,537	128,100		2,434	-3,076	127,458
0401	DLA ENERGY (FUEL PRODUCTS)	3,211	-5.07%	-163	-17	3,031	10.10%	306	-295	3,042
0402	SERVICE FUND FUEL	131	-5.07%	-7	-34	90	10.10%	9	-8	91
0411	ARMY SUPPLY	32	4.10%	1	417	450	8.12%	37	13	500
0412	NAVY MANAGED SUPPLY, MATL	2,630	4.02%	106	-716	2,020	8.29%	167	24	2,211
0414	AIR FORCE CONSOL SUST AG (SUPPLY)	18	9.69%	2	-17	3	2.88%	0	57	60
0416	GSA SUPPLIES & MATERIALS	13,035	2.00%	261	-3,539	9,757	1.90%	185	-53	9,889
0417	LOCAL PURCH SUPPLIES & MAT	66,607	2.00%	1,332	-32,322	35,617	1.90%	677	-4,057	32,237
0422	DLA MAT SUPPLY CHAIN (MEDICAL)	24,430	0.14%	34	-5,177	19,287	0.20%	39	-21	19,305

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**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2022 Budget Estimates
Summary of Price and Program Growth**

	<u>FY 2020 Program</u>	<u>Price Growth Percent</u>	<u>Price Growth</u>	<u>Program Growth</u>	<u>FY 2021 Program</u>	<u>Price Growth Percent</u>	<u>Price Growth</u>	<u>Program Growth</u>	<u>FY 2022 Program</u>
TOTAL DEFENSE WORKING CAPITAL FUND SUPPLIES AND MATERIALS	110,094		1,566	-41,405	70,255		1,420	-4,340	67,335
0502 ARMY FUND EQUIPMENT	373	4.10%	15	121	509	8.12%	41	708	1,258
0503 NAVY FUND EQUIPMENT	1,351	4.02%	54	-543	862	8.29%	71	-58	875
0505 AIR FORCE FUND EQUIP	33,891	0.00%	0	-33,891	0	0.00%	0	0	0
0506 DLA MAT SUPPLY CHAIN (CONST & EQUIP)	807	-0.09%	-1	-151	655	2.20%	14	148	817
0507 GSA MANAGED EQUIPMENT	6,985	2.00%	140	2,233	9,358	1.90%	178	-146	9,390
TOTAL DEFENSE WORKING CAPITAL FUND EQUIPMENT PURCHASES	43,407		209	-32,232	11,384		305	651	12,340
0601 ARMY INDUSTRIAL OPERATIONS	440	0.00%	0	-287	153	9.41%	14	-167	0
0611 NAVY SURFACE WARFARE CTR	5,708	8.14%	465	-5,436	737	0.96%	7	-6	738
0614 SPACE & NAVAL WARFARE CENTER	7,504	6.25%	469	-1,486	6,487	0.46%	30	97	6,614
0631 NAVY BASE SUPPORT (NFESC)	1,156	1.77%	20	137	1,313	4.17%	55	-41	1,327
0633 DLA DOCUMENT SERVICES	20,547	0.65%	134	-19,029	1,652	1.58%	26	-24	1,654
0634 NAVFEC (UTILITIES AND SANITATION)	12,239	1.80%	220	15,524	27,983	0.00%	0	1,535	29,518
0635 NAVY BASE SUPPORT (NAVFEC OTHER SUPPORT SERVICES)	15,545	1.80%	280	36,681	52,506	0.00%	0	-8,758	43,748
0647 DISA ENTERPRISE COMPUTING CENTERS	4,859	1.30%	63	95,160	100,082	0.00%	0	-1,624	98,458
0671 DISA DISN SUBSCRIPTION SERVICES (DSS)	11,829	4.80%	568	23,265	35,662	7.63%	2,721	-2,119	36,264
0675 DLA DISPOSITION SERVICES	1,328	0.00%	0	-1,327	1	0.00%	0	5	6
0677 DISA TELECOMM SVCS - REIMBURSABLE	216	0.00%	0	-143	73	0.49%	0	-20	53
0679 COST REIMBURSABLE PURCHASE	6,155	0.00%	0	-5,073	1,082	0.00%	0	22	1,104

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**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2022 Budget Estimates
Summary of Price and Program Growth**

		<u>FY 2020</u>	<u>Price</u>	<u>Price</u>	<u>Program</u>	<u>FY 2021</u>	<u>Price</u>	<u>Price</u>	<u>Program</u>	<u>FY 2022</u>
		<u>Program</u>	<u>Growth</u>	<u>Growth</u>	<u>Growth</u>	<u>Program</u>	<u>Growth</u>	<u>Growth</u>	<u>Growth</u>	<u>Program</u>
			<u>Percent</u>				<u>Percent</u>			
0680	BUILDING MAINT FUND PURCH	0	0.00%	0	42,902	42,902	1.00%	429	428	43,759
0682	INDUSTRIAL MOB CAPACITY	0	0.00%	0	250	250	1.90%	5	-255	0
0691	DFAS FINANCIAL OPERATIONS (ARMY)	7,254	-3.17%	-230	7,771	14,795	-2.84%	-420	2,333	16,708
0692	DFAS FINANCIAL OPERATIONS (NAVY)	15,817	6.91%	1,093	-10,219	6,691	-7.07%	-473	1,540	7,758
0693	DFAS FINANCIAL OPERATIONS (AIR FORCE)	4,384	17.29%	758	-2,703	2,439	-2.09%	-51	978	3,366
0696	DFAS FINANCIAL OPERATION (OTHER DEFENSE AGENCIES)	12,204	26.83%	3,274	-5,830	9,648	10.38%	1,001	-709	9,940
	TOTAL OTHER FUND PURCHASES	127,185		7,114	170,157	304,456		3,345	-6,786	301,015
0706	AMC CHANNEL PASSENGER	39,854	1.80%	717	-38,701	1,870	1.90%	36	-1,906	0
0707	AMC TRAINING	1,104	-6.60%	-73	-1,031	0	0.00%	0	0	0
0719	SDDC CARGO OPS-PORT HNDLG	1,386	-27.00%	-374	184	1,196	28.70%	343	-178	1,361
0771	COMMERCIAL TRANSPORT	14,276	2.00%	286	-1,946	12,616	1.90%	240	-50	12,806
	TOTAL TRANSPORTATION	56,620		556	-41,494	15,682		618	-2,133	14,167
0901	FOREIGN NATIONAL INDIRECT HIRE (FNIH)	55,040	2.00%	1,101	-13,252	42,889	2.27%	974	104	43,967
0902	SEPARATION LIAB (FNIH)	20	2.00%	0	-20	0	0.00%	0	0	0
0912	RENTAL PAYMENTS TO GSA (SLUC)	7,727	2.00%	155	13,992	21,874	1.90%	416	118	22,408
0913	PURCHASED UTILITIES (NON-FUND)	247,286	2.00%	4,946	-34,411	217,821	1.90%	4,139	10,919	232,879
0914	PURCHASED COMMUNICATIONS (NON-FUND)	40,022	2.00%	800	13,534	54,356	1.90%	1,033	3,051	58,440
0915	RENTS (NON-GSA)	101,589	2.00%	2,032	-64,770	38,851	1.90%	738	747	40,336
0917	POSTAL SERVICES (U.S.P.S)	4,627	2.00%	93	-974	3,746	1.90%	71		3,817

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**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2022 Budget Estimates
Summary of Price and Program Growth**

		<u>FY 2020</u>	<u>Price</u>	<u>Price</u>	<u>Program</u>	<u>FY 2021</u>	<u>Price</u>	<u>Price</u>	<u>Program</u>	<u>FY 2022</u>
		<u>Program</u>	<u>Growth</u>	<u>Growth</u>	<u>Growth</u>	<u>Program</u>	<u>Growth</u>	<u>Growth</u>	<u>Growth</u>	<u>Program</u>
			<u>Percent</u>				<u>Percent</u>			
0920	SUPPLIES & MATERIALS (NON-FUND)	791,337	3.43%	27,132	-246,662	571,807	1.90%	10,864	-87,869	494,802
0921	PRINTING & REPRODUCTION	19,422	2.00%	388	-4,471	15,339	1.90%	291	811	16,441
0922	EQUIPMENT MAINTENANCE BY CONTRACT	227,746	2.00%	4,555	-77,921	154,380	1.90%	2,933	-3,502	153,811
0923	FACILITIES SUST, REST, & MOD BY CONTRACT	977,697	2.00%	19,554	-405,177	592,074	1.90%	11,249	-132,027	471,296
0924	PHARMACEUTICAL DRUGS	3,430,311	3.90%	133,782	161,733	3,725,826	3.90%	145,307	-51,488	3,819,645
0925	EQUIPMENT PURCHASES (NON-FUND)	528,706	3.14%	16,599	-99,306	445,999	1.90%	8,474	137,619	592,092
0926	OTHER OVERSEAS PURCHASES	10,503	2.00%	210	-10,675	38	1.90%	1	-1	38
0927	AIR DEF CONTRACTS & SPACE SUPPORT (AF)	1,305	2.00%	26	-1,331	0	0.00%	0	0	0
0930	OTHER DEPOT MAINTENANCE (NON-FUND)	1,493	2.00%	30	-731	792	1.90%	15	-7	800
0932	MGT PROF SUPPORT SVCS	761,281	2.00%	15,226	-452,920	323,587	1.90%	6,148	-19,050	310,685
0933	STUDIES, ANALYSIS & EVAL	154,727	2.00%	3,095	-128,642	29,180	1.90%	554	-1,471	28,263
0934	ENGINEERING & TECH SVCS	81,895	2.00%	1,638	-78,217	5,316	1.90%	101	-414	5,003
0935	TRAINING AND LEADERSHIP DEVELOPMENT	0	0.00%	0	0	0	0.00%	0	26	26
0936	TRAINING AND LEADERSHIP DEVELOPMENT (OTHER CONTRACTS)	2,756	2.00%	55	-2,811	0	0.00%	0	0	0
0937	LOCALLY PURCHASED FUEL (NON-FUND)	2,235	2.00%	45	131	2,411	1.90%	46	-10	2,447
0955	OTHER COSTS (MEDICAL CARE)	799,388	3.77%	30,127	-473,200	356,315	3.90%	13,896	-26,636	343,575
0957	OTHER COSTS (LAND AND STRUCTURES)	219,387	2.00%	4,388	167,597	391,372	1.90%	7,436	-24,428	374,380
0959	OTHER COSTS (INSURANCE CLAIMS/INDMNTIES)	1,426	2.00%	29	-1,452	3	1.90%	0		3
0960	OTHER COSTS (INTEREST AND DIVIDENDS)	95	2.00%	2	1,422	1,519	1.90%	29	1	1,549
0964	OTHER COSTS (SUBSISTENCE AND SUPPORT OF PERSONS)	14,013	2.00%	280	-10,843	3,450	1.90%	66	-14	3,502
0984	EQUIPMENT CONTRACTS	0	0.00%	0	500	500	1.90%	10	-510	0

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**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2022 Budget Estimates
Summary of Price and Program Growth**

		<u>FY 2020 Program</u>	<u>Price Growth Percent</u>	<u>Price Growth</u>	<u>Program Growth</u>	<u>FY 2021 Program</u>	<u>Price Growth Percent</u>	<u>Price Growth</u>	<u>Program Growth</u>	<u>FY 2022 Program</u>
0985	RESEARCH & DEVELOPMENT, CONTRACTS	17,727	0.00%	0	-17,727	0	0.00%	0	0	0
0986	MEDICAL CARE CONTRACTS	14,941,736	3.90%	582,728	427,232	15,951,696	3.90%	622,116	1,465,322	18,039,134
0987	OTHER INTRA-GOVT PURCH	430,580	2.00%	8,612	-33,140	406,052	1.90%	7,715	1,301	415,068
0988	GRANTS	49,782	2.00%	996	14,543	65,321	1.90%	1,241	-34,831	31,731
0989	OTHER SERVICES	593,485	2.00%	11,870	-310,983	294,372	1.90%	5,593	-39,299	260,666
0990	IT CONTRACT SUPPORT SERVICES	1,582,046	2.00%	31,641	-143,172	1,470,515	1.90%	27,940	87,077	1,585,532
0991	FOREIGN CURRENCY VARIANCE	-336	2.00%	-7	343	0	0.00%	0	0	0
0993	OTHER SERVICES - SCHOLARSHIPS	3	2.00%	0	-3	0	0.00%	0	0	0
	TOTAL OTHER PURCHASES	26,097,057		902,125	-1,811,781	25,187,401		879,396	1,285,539	27,352,336
	GRAND TOTAL	32,963,908		1,012,750	-2,211,936	31,764,722		1,024,795	1,393,202	34,182,719

1. FY 2021 current estimate includes \$650,245K fact-of-life increase attributed to COVID-19 Pandemic healthcare claims.

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**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2022 Budget Estimates
Personnel Summary**

	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>Change FY 2021/2022</u>
<u>Active Military End Strength (E/S) (Total)</u>	<u>73,583</u>	<u>70,317</u>	<u>71,865</u>	<u>1,548</u>
Officer	26,443	26,509	27,372	863
Enlisted	47,140	43,808	44,493	685
 <u>Civilian End Strength (Total)</u>	 <u>66,718</u>	 <u>58,381</u>	 <u>59,424</u>	 <u>1,043</u>
U.S. Direct Hire	63,809	56,151	57,157	1,006
Foreign National Direct Hire	1,027	1,001	1,001	0
Total Direct Hire	64,836	57,152	58,158	1,006
Foreign National Indirect Hire	1,282	1,023	1,023	0
Reimbursable Civilian	600	206	243	37
 <u>Active Military Average Strength (A/S) (Total)</u>	 <u>76,156</u>	 <u>71,951</u>	 <u>71,092</u>	 <u>-859</u>
Officer	27,496	26,477	26,941	464
Enlisted	48,660	45,474	44,151	-1,323
 <u>Civilian FTEs (Total)</u>	 <u>62,323</u>	 <u>56,921</u>	 <u>57,106</u>	 <u>185</u>
U.S. Direct Hire	59,337	54,785	54,933	148
Foreign National Direct Hire	1,054	952	952	0
Total Direct Hire	60,391	55,737	55,885	148
Foreign National Indirect Hire	1,332	983	983	0
Reimbursable Civilian	600	201	238	37
 Contractor FTEs (Total)	 24,162	 23,733	 24,143	 410

Personnel Summary Explanations

1. This exhibit represents the total civilian and contractor FTEs associated with the O&M, 0130D appropriation.

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**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2022 Budget Estimates
Summary of Funding Increases and Decreases**

	O&M	RDT&E	Procurement	DHP Total
FY 2021 President's Budget Request (Amended, if applicable)	31,349,553	722,892	617,926	32,690,371
In-House Care	9,560,564			9,560,564
Private Sector Care	15,841,887			15,841,887
Consolidated Health Support	1,338,269			1,338,269
Information Management	2,039,910			2,039,910
Management Activities	330,627			330,627
Education and Training	315,691			315,691
Base Operations/Communications	1,922,605			1,922,605
RDT&E		722,892		722,892
Procurement			617,926	617,926
1. Congressional Adjustments	-235,137	1,669,687	-73,557	1,360,993
a) Distributed Adjustments	-236,796	1,669,687	-73,557	1,359,334
b) Undistributed Adjustments	0		0	0
c) Adjustments to Meet Congressional Intent	0	0		0
d) General Provisions	1,659	0	0	1,659
FY 2021 Appropriated Amount	31,114,416	2,392,579	544,369	34,051,364
In-House Care	9,073,423			9,073,423
Private Sector Care	16,008,365			16,008,365
Consolidated Health Support	1,337,067			1,337,067
Information Management	2,089,039			2,089,039
Management Activities	330,627			330,627
Education and Training	335,685			335,685
Base Operations/Communications	1,940,210			1,940,210
RDT&E		2,392,579		2,392,579
Procurement			544,369	544,369
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	650,245	0	0	650,245
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

**Defense Health Program
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Fiscal Year (FY) 2022 Budget Estimates
Summary of Funding Increases and Decreases**

	<u>O&M</u>	<u>RDT&E</u>	<u>Procurement</u>	<u>DHP Total</u>
c) Emergent Requirements	650,245	0	0	650,245
1. Program Increases	650,245	0	0	650,245
a) One-Time Costs	0	0	0	0
b) Program Growth	650,245	0	0	650,245
2. Program Reductions	0	0	0	0
a) One-Time Costs	0	0	0	0
b) Program Decreases	0	0	0	0
FY 2021 Baseline Funding	31,764,661	2,392,579	544,369	34,701,609
In-House Care	9,073,423			9,073,423
Private Sector Care	16,658,610			16,658,610
Consolidated Health Support	1,337,067			1,337,067
Information Management	2,089,039			2,089,039
Management Activities	330,627			330,627
Education and Training	335,685			335,685
Base Operations/Communications	1,940,210			1,940,210
RDT&E		2,392,579		2,392,579
Procurement			544,369	544,369
4. Reprogramming	0	0	0	0
a) Increases	0	0	0	0
b) Decreases	0	0	0	0
Revised FY 2021 Estimate	31,764,661	2,392,579	544,369	34,701,609
In-House Care	9,073,423			9,073,423
Private Sector Care	16,658,610			16,658,610
Consolidated Health Support	1,337,067			1,337,067
Information Management	2,089,039			2,089,039
Management Activities	330,627			330,627
Education and Training	335,685			335,685
Base Operations/Communications	1,940,210			1,940,210
RDT&E		2,392,579		2,392,579
Procurement			544,369	544,369
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 2021 Normalized Current Estimate	31,764,661	2,392,579	544,369	34,701,609

**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2022 Budget Estimates
Summary of Funding Increases and Decreases**

	<u>O&M</u>	<u>RDT&E</u>	<u>Procurement</u>	<u>DHP Total</u>
In-House Care	9,073,423			9,073,423
Private Sector Care	16,658,671			16,658,671
Consolidated Health Support	1,337,067			1,337,067
Information Management	2,089,039			2,089,039
Management Activities	330,627			330,627
Education and Training	335,685			335,685
Base Operations/Communications	1,940,210			1,940,210
RDT&E		2,392,579		2,392,579
Procurement			544,369	544,369
6. Price Change	1,024,794	13,117	14,186	1,052,097
7. Functional Transfers	-4,531	0	0	-4,531
a) Transfers In	1,061	0	0	1,061
b) Transfers Out	-5,592	0	0	-5,592
8. Program Increases	1,809,430	64,248	229,574	2,103,252
a) Annualization of New FY 2021 Program	0	0	0	0
b) One-Time FY 2022 Increases	0	0	0	0
c) Program Growth in FY 2022	1,809,430	64,248	229,574	2,103,252
9. Program Decreases	-411,696	-1,839,264	-9,121	-2,260,081
a) Annualization of FY 2021 Program Decreases	0	0	0	0
b) One-Time FY 2021 Increases	-44,700	-1,763,900	0	-1,808,600
c) Program Decreases in FY 2022	-366,996	-75,364	-9,121	-451,481
FY 2022 Budget Request	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

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**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2022 Budget Estimates
In-House Care OP-5 Exhibit**

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.

**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2022 Budget Estimates
In-House Care OP-5 Exhibit**

III. Financial Summary (\$ in Thousands):

	FY 2020	Budget	FY 2021			Current	FY 2022
			Congressional Action				
A. BA Subactivities	<u>Actuals</u>	<u>Request</u>	<u>Amount</u>	<u>Percent</u>	<u>Appropriated</u>	<u>Estimate</u>	<u>Request</u>
1. MEDCENs, Hospitals & Clinics (CONUS)	\$7,401,204	\$6,935,666	\$-334,017	-4.82%	\$6,601,649	\$6,601,649	\$7,036,148
2. MEDCENs, Hospitals & Clinics (OCONUS)	\$519,990	\$464,918	\$-352	-0.08%	\$464,566	\$464,566	\$524,277
3. Pharmaceuticals (CONUS)	\$1,326,573	\$1,548,414	\$-130,960	-8.46%	\$1,417,454	\$1,417,454	\$1,515,825
4. Pharmaceuticals (OCONUS)	\$118,409	\$153,016	\$0	0.00%	\$153,016	\$153,016	\$151,875
5. Dental Care (CONUS)	\$433,463	\$423,471	\$-21,599	-5.10%	\$401,872	\$401,872	\$452,109
6. Dental Care (OCONUS)	\$38,441	\$35,079	\$-213	-0.61%	\$34,866	\$34,866	\$39,770
Total	\$9,838,080	\$9,560,564	\$-487,141	-5.10%	\$9,073,423	\$9,073,423	\$9,720,004

1. FY 2020 actuals includes \$57,248K for Overseas Contingency Operations (OCO).
2. FY 2020 actuals includes \$556,041K CARES Act COVID-19 funding.
3. FY 2020 actuals does not include Department of Defense (DoD) Medicare-Eligible Retiree Health Care Fund (MERHCF) of \$1,846,400K (O&M only).
4. FY 2021 estimate includes \$65,072K for OCO.
5. FY 2021 estimate does not reflect anticipated DoD MERHCF receipts of \$1,995,500K (O&M only).
6. FY 2022 estimate includes \$63,200K for Direct War Costs accounted for in the base.
7. FY 2022 estimate includes \$272,800K for COVID-19 Pandemic Response for testing and vaccine booster support.
8. FY 2022 estimate does not reflect anticipated DoD MERHCF receipts of \$2,064,700K (O&M only).

**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2022 Budget Estimates
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III. Financial Summary (\$ in Thousands): (Cont.)

<u>B. Reconciliation Summary</u>	<u>Change FY 2021/FY 2021</u>	<u>Change FY 2021/FY 2022</u>
BASELINE FUNDING	\$9,560,564	\$9,073,423
Congressional Adjustments (Distributed)	-478,800	
Congressional Adjustments (Undistributed)	0	
Adjustments to Meet Congressional Intent	0	
Congressional Adjustments (General Provisions)	-8,341	
SUBTOTAL APPROPRIATED AMOUNT	9,073,423	
Fact-of-Life Changes (2021 to 2021 Only)	0	
SUBTOTAL BASELINE FUNDING	9,073,423	
Supplemental	0	
Reprogrammings	0	
Price Changes		250,219
Functional Transfers		0
Program Changes		396,362
CURRENT ESTIMATE	9,073,423	9,720,004
Less: Wartime Supplemental	0	
NORMALIZED CURRENT ESTIMATE	\$9,073,423	\$9,720,004

**Defense Health Program
 Operation and Maintenance, Defense-Wide
 Fiscal Year (FY) 2022 Budget Estimates
 In-House Care OP-5 Exhibit**

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

FY 2021 President's Budget Request (Amended, if applicable)	\$9,560,564
1. Congressional Adjustments	\$-487,141
a) Distributed Adjustments	\$-478,800
1) DWR 1 - Restore MTF Descope:	\$36,260
2) Excess Growth - Equipment Purchase:	\$-29,500
3) Excess Growth - Medical Care Contracts:	\$-40,100
4) Excess Growth - Printing & Reproduction:	\$-6,300
5) Excess to Need:	\$-136,015
6) Inadequate Justification:	\$-9,065
7) Medical Reform Implementation - Transfer Price:	\$-334,613
8) Misaligned Program Growth:	\$-29,539
9) Overseas Contingency Operations Funds Enacted for Direct War Costs:	\$65,072
10) Program Increase - Telehealth for Military Children and Families:	\$5,000
b) Undistributed Adjustments	\$0
c) Adjustments to Meet Congressional Intent	\$0

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

d) General Provisions	\$-8,341
1) Favorable Foreign Currency:	\$-8,341
FY 2021 Appropriated Amount.....	\$9,073,423
2. War-Related and Disaster Supplemental Appropriations.....	\$0
a) OCO Supplemental Funding	\$0
3. Fact-of-Life Changes.....	\$0
a) Functional Transfers.....	\$0
b) Technical Adjustments	\$0
c) Emergent Requirements.....	\$0
FY 2021 Baseline Funding.....	\$9,073,423
4. Reprogrammings (Requiring 1415 Actions).....	\$0
a) Increases.....	\$0
b) Decreases	\$0
Revised FY 2021 Estimate.....	\$9,073,423
5. Less: Item 2, War-Related and Disaster Supplemental Appropriation and Item 4, Reprogrammings	\$0
a) Less: OCO Supplemental Funding.....	\$0

**Defense Health Program
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Fiscal Year (FY) 2022 Budget Estimates
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III. Financial Summary (\$ in Thousands): (Cont.)

FY 2021 Normalized Current Estimate	\$9,073,423
6. Price Change	\$250,219
7. Functional Transfers.....	\$0
a) Transfers In	\$0
b) Transfers Out	\$0
8. Program Increases.....	\$612,527
a) Annualization of New FY 2021 Program	\$0
b) One-Time FY 2022 Increases	\$0
c) Program Growth in FY 2022.....	\$612,527
1) a. DHP COVID-19 Pandemic Response:	\$272,800
Increase requirements in the In-House Care Budget Activity Group to fund COVID-19 testing (+\$202.8 million) and vaccine boosters (+\$70.0 million) to support the Administration's priorities to move quickly to contain the COVID-19 Pandemic and inoculate the United States population efficiently and equitably. The FY 2021 In-House Care baseline funding is \$9,008,351K.	

**Defense Health Program
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Fiscal Year (FY) 2022 Budget Estimates
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III. Financial Summary (\$ in Thousands): (Cont.)

2) b. Capability Replacement:\$104,462

Funds required to provide funding for civilian full-time equivalents (FTE) and contractor personnel to ensure uninterrupted access to timely, high-quality healthcare as the Department redirects uniformed manpower toward more direct warfighting functions. The Defense Health Agency (DHA) and the Military Medical Services established common mitigation planning factors, reviewed multi-service market cuts, identified mitigation challenges, and aggregated Medical Treatment Facility level mitigation plans to inform the FY 2022 Budget Request. These plans create defensible medical ES drawdown ramps that comply with Section 719 of the FY 2020 National Defense Authorization Act (NDAA). Actual allocation of civilian or contractor personnel workforce requirement will be determined as the DHA reviews each Military Medical Treatment Facility product line requirements. This allocation complies with Office of Management and Budget (OMB) direction to update the FY 2020 NDAA Section 719 Report to Congress to be consistent with the updated medical drawdown plan. The FY 2021 In-House Care baseline funding is \$9,008,371K. The FY 2021 In-House Care contractor staffing is 14,363 CMEs.

3) c. Defense Wide Review - Medical Reforms Savings Update:.....\$96,700

Adds funding to the Defense Health Agency for fact-of-life delays associated with implementing three elements of medical business reforms identified in the Defense Wide Review 1.0 and which were included in the PB 2021 submission. Fact-of-life events to include the COVID-19 pandemic delayed implementation of the reform efforts and require an adjustment to the timing of the savings estimates. The following program reform implementation have been delayed:

a.) 50 Military Medical Treatment Facilities Savings Update (+\$51,700K): The de-scoping of the 50 MTFs was delayed due to the onset of the COVID-19 Pandemic in 2020. Market assessments for each MTF will be revalidated taking into consideration any local healthcare market changes. From January to June 2021, the implementation plans for each MTF will be updated and modified as appropriate. Beginning in July 2021, the MTF transitions are expected to resume. This delay will cause a shift in the expected savings by one year.

b.) Delay Transition of Navy Hospital Naples and Navy Hospital Sigonella to Outpatient Facilities (+\$20,000K): Funding restored to maintain inpatient medical capacity in FY 2022 at Naval Hospital Naples and Naval Hospital Sigonella due to degraded support of forward deployed naval and joint forces in response to pandemic and emerging infectious diseases pending further review by the Department of Defense.

c.) Re-Negotiate for Full Reimbursement Costs for Interagency Patients at DoD Health Facilities (+\$25,000K): Shortly after PB 2021 was finalized, the Secretary of Defense and Secretary of Veterans Affairs discussed this reform initiative and a decision was made to not pursue seeking the full reimbursement rate for interagency medical reimbursements at DoD medical facilities. The increased funding restores the savings assumed by this reform initiative. The FY 2021 In-House Care baseline funding is \$9,008,351K.

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

- 4) d. Federal Employee Retirement System – Agency Contribution Rate Assumption:.....\$40,090
Increases civilian personnel costs to reflect the revised Federal Employee Retirement System (FERS) Agency Contribution for FY 2022 in accordance with Office of Management and Budget (OMB) Circular No. A-11. The FERS FY 2022 regular employee rate is 18.4%, which is a 1.1% increase above the FY 2021 rate of 17.3%. The FY 2021 In-House Care baseline funding is \$9,008,351K.
- 5) e. Increased Pharmaceutical Requirements:\$37,044
Increases pharmaceutical requirements in order to better align actual budget execution. Detailed trend analysis was performed in order to better project cost per prescription, fill of specialty drugs targeted for specific conditions, and cost of brand named medications. Incorporating this analysis into budget projections couple with better pricing methodologies resulted in improved requirements identification and resource management. The FY 2021 In House Care, Pharmaceuticals baseline funding is \$1,667,700K.
- 6) f. Fiscal Year 2022 Performance Awards:.....\$30,694
Increases the FY 2022 civilian personnel awards budget at the aggregate level for General Schedule (GS) and Wage Grade WG employees in accordance with the Office of Management and Budget (OMB) Circular No. A-11 direction to increase civilian awards spending by no less than one (1) percentage point of FY 2020 GS and WG salary spending. The increase reflects additional civilian award funding of one (1) percentage point of the GS and WG salary spending above the FY 2020 awards budget of 1.5%. The FY 2021 In-House Care baseline funding is \$9,008,351K.
- 7) g. Civilian Pay Raise Assumptions:.....\$17,006
Increase required to fund civilian personnel costs for the net effect of the Civilian Pay Raise Assumptions which was increased from 1.0% to 2.7%. The FY 2021 In-House Care Civilian Pay baseline budget is \$4,771,915K.
- 8) h. Virtual Health Expansion:\$6,852
Resources required to fund the incremental increase for the expansion of the Military Health System (MHS) Virtual Health Program, which synchronizes, standardizes, and coordinates virtual medical services across the Department of Defense that support remote, clinical, operational and garrison forces. Funds will support virtual health synchronous solutions that help enable markets and allow health care providers to deliver real-time health assessments, diagnoses, interventions, and supervision through video conference, telephone, or tablet application vastly improving access to care. Resources will also support virtual video visit roll-outs, as well as, virtual health cart purchases and sustainment that provide remote specialty care in IOC markets by integrating cameras and displays to bring remote physicians right to the side of the patient. Lastly, funds will support remote health monitoring platform capabilities, as well as, asynchronous virtual health solutions used in the development of the Global Teleconsultation Portal (GTP) to support teleconsultations across the MHS Enterprise. The FY 2021 In-House Care baseline funding is \$9,008,351K.

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

9) i. Increased Foreign Currency Fluctuation Rates:\$4,514
Funding is required due to the projected change in the value of the U.S. dollar based on the 6-month historical weekly rates. Funding will be utilized for planned overseas purchases. The FY 2021 In-House Care baseline funding is \$9,008,351K.

10) j. Pharmacy Refill Realigned to In-House Care:\$1,417
Realigns Defense Health Agency funding to the In-House Care Budget Activity Group from Information Management/Information Technology (IM/IT)(\$-1,417K) to account for the budgeting and execution of prescription refill/audio care contractual requirements within the Pharmacy Operations Division at the Defense Health Agency. The FY 2021 In-House Care baseline funding is \$9,008,351K.

11) k. Virtual Medical Library Realigned to the Defense Health Agency:\$948
Realigns the Virtual Medical Library program to the Defense Health Agency's In House Care Budget Activity (+\$948K) from Education and Training Budget Activity Group (BAG) (-\$546K) and the Uniformed Services University of the Health Sciences (-\$402K) to provide uniformity of available data in the Virtual Medical Library program. Funding provides a collection of medical e-journals, e-books, and serve as a searchable medical/biomedical database that provides military health professionals easy access to common clinical data resulting in the standardization of care throughout the Military Health System (MHS). The FY 2021 In-House Care baseline funding is \$9,008,351K.

12) l. Direct War Costs Accounted For In The Base:\$0
Direct War Costs of \$63,200K is accounted for in the In-House Care baseline budget request for FY 2022. This 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 to sustain the delivery of patient care in Military Medical Treatment Facilities (MTFs). Funds are required as forces are drawn down from theater activities. The FY 2021 In-House Care baseline budget is \$9,008,351K.

9. Program Decreases\$-216,165

a) Annualization of FY 2021 Program Decreases\$0

b) One-Time FY 2021 Increases\$0

c) Program Decreases in FY 2022\$-216,165

**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2022 Budget Estimates
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III. Financial Summary (\$ in Thousands): (Cont.)

1) a. Defense Health Program Reform Management - Contract Efficiencies:\$-203,732
Reduces requirements and funding in the In-House Care Budget Activity Group through the Military Health System enterprise-wide efforts to increase contract standardization. Funds were reduced in the following In-House Care programs:

(a) Medical Logistics Enterprise (-\$60,000K): Savings will be realized by leveraging best practices and limiting variation in logistics support to the Medical Treatment Facilities for non-drug supplies, equipment, and services. The result of these savings will deliver an integrated system of medical logistics materiel, equipment, and services along the continuum of operational and institutional Military Health Systems missions.

(b) Purchased Services (-\$60,000K): Savings will be realized by increased contract standardization, elimination of duplicative contracts competing for the same services, leveraging the buying power of markets as they are brought online, continued use of nationwide contract for medical professionals, and consolidating contracting under one authority.

(c) Access Enhancement Enterprise (-\$39,103K): Savings will be realized by establishing standardized processes to increase direct-care patient utilization rates, maximizing primary and specialty care capacity, and meeting the beneficiary demand for care. These actions will result in improved access to care and optimized use of the Military Health System resources.

(d) Services Efficiencies (-\$30,629K): Contracts requirements were reduced based on projected savings from consolidations as the Defense Health Agency assumes authority, direction and control of the Military Medical Treatment Facilities (MTFs) Healthcare Delivery operations. Purchased services savings will be realized by increased contract standardization and elimination of duplicative contracts.

(e) Radiology Enterprise (-\$14,000K): Savings will be realized by standardizing clinical processes, staffing models, and equipment purchasing, thereby deploying a fully interoperated radiology system across the Military Health System. These savings will result in standardized tele-radiology system, a singular process for radiology equipment acquisition, and the deployment of the Picture Archiving and Communication Systems across the enterprise.

The FY 2021 In-House Care baseline funding is \$9,008,351K.

2) b. Reduced Army End Strength Projections:.....\$-5,673
Decreases funding for healthcare requirements associated the reduction of Active Army end strength projection for FY 2022. Army end strength was projected to be 487,000 for FY 2022. The projection is reduced by 2,000 to 485,000 and requires a corresponding reduction to the healthcare requirement. The FY 2021 In House Care baseline funding is \$9,008,351K.

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

3) c. Clinical Investigations Program Realigned to the Defense Health Agency:\$-6,558

Realigns the Clinical Investigations Program and Science & Technology (S&T) program and associated resources from the In House Care Budget Activity Group (BAG) to the Consolidated Health Support BAG (-\$6,558K) to consolidate the program under the authority, direction and control of the Defense Health Agency. Funding for non-pay requirements were realigned to the Defense Health Agency to support execution of the program in accordance with DoDI 6000.08. The CIP and S&T programs establishes DoD policy, assigns responsibilities and provides procedures for funding and administration of Research and Clinical Investigation Programs funded by the Defense Health Program (DHP) appropriation. It is an essential component of medical care and teaching and supports the Graduate Health Sciences Education and other health programs of the Military Services. The program also supports development and employment of health readiness solutions that protect, treat and optimize total force the health and performance. The FY 2021 In House Care baseline funding is \$9,008,351K.

4) d. Information Technology Healthcare Mission Funding Realigned to the Defense Health Agency:\$-202

Realigns the Information Technology Healthcare mission and funding from In House Care Budget Activity Group (BAG) to Information Management/Information Technology (IM/IT) BAG (+202) to account for the budgeting and execution of non-pay information technology (IT) healthcare resources at the Defense Health Agency. The Defense Health Agency is consolidating all non-pay IT healthcare mission resources within IM/IT. The FY 2021 In House Care baseline funding is \$9,008,351K.

FY 2022 Budget Request\$9,720,004

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

	FY 2020 Actuals*	FY 2021 Estimate*	FY 2022 Estimate*	FY 2020-2021 Change	FY 2021-2022 Change
Population - Eligible Beneficiaries, CONUS					
Active Duty **	1,475,005	1,481,244	1,480,979	6,239	-266
Active Duty Family Members	1,843,900	1,855,146	1,858,420	11,246	3,274
Retirees	1,013,131	1,009,581	1,006,617	-3,550	-2,964
Family Members of Retirees	<u>2,456,272</u>	<u>2,451,526</u>	<u>2,447,742</u>	<u>-4,746</u>	<u>-3,784</u>
Subtotal Eligible	6,788,308	6,797,498	6,793,757	-9,190	-3,741
Medicare Eligible Beneficiaries ***	<u>2,414,609</u>	<u>2,437,430</u>	<u>2,460,609</u>	<u>22,821</u>	<u>23,178</u>
Total Average Eligible Beneficiaries	9,202,917	9,234,928	9,254,366	32,011	19,437
Population - Eligible Beneficiaries, OCONUS					
Active Duty **	163,611	163,972	163,625	361	-347
Active Duty Family Members	129,039	129,359	129,293	320	-66
Retirees	21,965	21,865	21,775	-100	-91
Family Members of Retirees	<u>56,580</u>	<u>56,483</u>	<u>56,405</u>	<u>-97</u>	<u>-78</u>
Subtotal Eligible	371,195	371,679	371,098	484	-581
Medicare Eligible Beneficiaries	<u>41,223</u>	<u>41,571</u>	<u>41,927</u>	<u>348</u>	<u>356</u>
Total Average Eligible Beneficiaries	412,418	413,250	413,025	832	-225
Population - Eligible Beneficiaries, Worldwide					
Active Duty **	1,638,616	1,645,217	1,644,604	6,601	-613
Active Duty Family Members	1,972,939	1,984,505	1,987,713	11,566	3,208
Retirees	1,035,096	1,031,446	1,028,391	-3,650	-3,055
Family Members of Retirees	<u>2,512,852</u>	<u>2,508,009</u>	<u>2,504,147</u>	<u>-4,843</u>	<u>-3,862</u>
Subtotal Eligible	7,159,503	7,169,177	7,164,855	9,674	-4,322
Medicare Eligible Beneficiaries:					
Active Duty Family Members	4,723	4,736	4,738	13	2
Guard/Reserve Family Members	1,597	1,624	1,645	27	21
Eligible Retirees	1,186,370	1,200,405	1,214,243	14,035	13,837
Eligible Family Members of Retirees ****	768,593	777,534	786,385	8,941	8,851
Survivors	492,422	492,575	493,399	153	824
Others	<u>2,127</u>	<u>2,127</u>	<u>2,127</u>	<u>0</u>	<u>0</u>
Total Medicare Eligible Beneficiaries	2,455,832	2,479,001	2,502,536	23,169	23,534
Total Average Eligible Beneficiaries	9,615,335	9,648,178	9,667,391	32,843	19,213

1. (*) FY 2020-2022 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 defined as MERHCF beneficiaries: 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 defined as MERHCF beneficiaries: Family Members of Retirees, Inactive Guard/Reserves, and Inactive Guard/Reserve Family Members.
5. Numbers may not sum to totals due to rounding.
6. USFHP enrollees who are also Medicare Eligible are shown in Eligible Beneficiaries, not under Medicare Eligible Beneficiaries.

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

	FY 2020 Actuals*	FY 2021 Estimate*	FY 2022 Estimate*	FY 2020-2021 Change	FY 2021-2022 Change
<u>Enrollees - Direct Care</u>					
TRICARE Region - East	1,628,600	1,635,160	1,634,551	6,560	-609
TRICARE Region - West	741,840	744,828	744,551	2,988	-277
TRICARE Region - Europe	122,430	122,923	122,877	493	-46
TRICARE Region - Pacific	131,450	131,979	131,930	529	-49
TRICARE Region - Latin America	2,533	2,543	2,542	10	-1
Alaska	<u>52,698</u>	<u>52,910</u>	<u>52,891</u>	<u>212</u>	<u>-20</u>
Sub-Total CONUS Regions	2,423,138	2,432,899	2,431,993	9,761	-906
Sub-Total OCONUS Regions	<u>256,413</u>	<u>257,446</u>	<u>257,350</u>	<u>1,033</u>	<u>-96</u>
Total Direct Care Enrollees	2,679,551	2,690,345	2,689,343	10,794	-1,002

Source: Service Medical Departments Business Plans

Enrollees are only TRICARE PRIME Enrollees enrolled to a military treatment facility.

Excludes "Plus" empaneled and other TRICARE space available users. Also excludes MHS Genesis Sites due to unavailability of reliable data at this time.

Effective January 1, 2018, TRICARE North and South Regions combined to form TRICARE East in accordance with the 2017 National Defense Authorization Act.

	FY 2020 Actuals*	FY 2021 Estimate*	FY 2022 Estimate*	FY 2020-2021 Change	FY 2021-2022 Change
<u>Direct Care System Workload (from M2 and Business Planning Tool)</u>					
Inpatient Admissions, Non-Weighted (SIDR Dispositions-All)	138,779	123,667	125,443	-15,112	1,777
Inpatient Admissions, Weighted (MS-DRG RWPs, Non Mental Health)	102,803	91,608	92,924	-11,195	1,316
Inpatient Admissions, Occupied Bed Days (Mental Health Only)	69,337	61,786	62,674	-7,551	888
Average Length of Stay (ALL Bed Days/All Dispositions)	2.88	2.88	2.88	0	0.00
Ambulatory Visits, Non-Weighted (Encounters, CAPER)	31,168,225	27,774,134	28,173,117	-3,394,091	398,983
Ambulatory Visits, Weighted (Adj Provider Aggregate RVUs, CAPER)	56,101,441	49,992,225	50,710,377	-6,109,215	718,151
Ambulatory Procedures, Weighted (Aggregate Weight APCs, CAPER)	7,012,417	6,248,793	6,338,559	-763,623	89,766
Number of Outpatient Pharmacy Prescriptions "Scripts"	22,499,853	24,453,830	25,878,189	1,953,977	1,424,359

1. Data source is M2 and performance plans.

2. Workload excludes Tricare for Life (TFL) patients.

3. FY 2021 - FY 2022 projections assumes resiliency and reduced impacts of COVID-19.

	FY 2020 Actuals*	FY 2021 Estimate*	FY 2022 Estimate*	FY 2020-2021 Change	FY 2021-2022 Change
<u>Dental Workload (Dental Weighted Values (DWVs)(from Components)</u>					
CONUS	7,096,151	6,578,979	7,352,599	-517,172	773,620
OCONUS	<u>1,414,953</u>	<u>1,283,355</u>	<u>1,449,838</u>	<u>-131,598</u>	<u>166,484</u>
Total DWVs	8,511,104	7,862,334	8,802,437	-648,770	940,104
<u>CONUS</u>					
Active Duty	6,580,091	6,100,530	6,817,889	-479,561	717,359
Non-Active Duty	<u>516,060</u>	<u>478,449</u>	<u>534,710</u>	<u>-37,611</u>	<u>56,261</u>
Total CONUS	7,096,151	6,578,979	7,352,599	-517,172	773,620
<u>OCONUS</u>					
Active Duty	1,067,641	968,345	1,093,964	-99,296	125,619
Non-Active Duty	<u>347,312</u>	<u>315,010</u>	<u>355,875</u>	<u>-32,302</u>	<u>40,865</u>
Total OCONUS	1,414,953	1,283,355	1,449,838	-131,598	166,484

1. DWV Workload data excludes MHS Genesis sites due to unavailability of reliable data at this time.

2. FY 2021-2022 Estimates are based upon performance plan projections and assumes resiliency and reduced impacts of COVID-19.

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V. Personnel Summary:

	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>Change FY 2020/ FY 2021</u>	<u>Change FY 2021/ FY 2022</u>
Active Military End Strength (E/S) (Total)	49,322	46,045	48,292	-3,277	2,247
Officer	16,201	16,325	17,144	124	819
Enlisted	33,121	29,720	31,148	-3,401	1,428
Active Military Average Strength (A/S) (Total)	36,025	47,684	47,169	11,659	-515
Officer	1,656	16,263	16,735	14,607	472
Enlisted	34,369	31,421	30,434	-2,948	-987
Civilian FTEs (Total)	47,240	45,847	45,847	-1,393	0
U.S. Direct Hire	45,448	44,259	44,259	-1,189	0
Foreign National Direct Hire	806	653	653	-153	0
Total Direct Hire	46,254	44,912	44,912	-1,342	0
Foreign National Indirect Hire	827	776	776	-51	0
Reimbursable Civilians	159	159	159	0	0
Average Annual Civilian Salary (\$ in thousands)	102.4	104.4	108.5	2.1	4.1
Contractor FTEs (Total)	15,237	14,363	14,518	-874	155

Personnel Summary Explanations:

Explanation of changes in Active Military End Strength: The decrease from FY 2020 to FY 2021 (-3,277) includes reductions in support of Section 702 of the FY 2017 National Defense Authorization Act, Reform of Administration of the Defense Health Agency and military medical treatment facilities to include Major Headquarters Activities and mission transfers to the Military Departments for medical readiness programs (-3,277: Army: -626, Navy: -428, Air Force: -2,223). The increase from FY 2021 to FY 2022 (+2,247) includes the Tech Adjustment made by the military departments for the revised drawdown reductions (Army: +1,102, Navy: -65, Air Force: +1,210).

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V. Personnel Summary: (Cont.)

Explanation of changes in Civilian FTEs: The decrease from FY 2020 to FY 2021 (-1,393) includes Service headquarters execution and internal reprogramming adjustments (-698: Army: +1,432, Direct Care Financial Management: -1,360, Air Force: -619, Navy: -149, USUHS: -2); and the transfer of In-House Care FTEs following the Defense Wide Review to the Department of the Army (-390) and the Department of the Navy (-305). The change from FY 2021 to FY 2022 is zero (0) for In-House Care.

Explanation of changes in Contractor FTEs: The decrease from FY 2020 to FY 2021 (-874) is attributed to Enterprise-wide DHP Reform Management efforts to shape the DHP workforce. The increase from FY 2021 to FY 2022 (+155) is attributed to the MHS-wide efforts to mitigate access-to-care issues caused by the reduction in military providers.

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

	FY 2020 Program	Change from FY 2020 to FY 2021		FY 2021 Program	Change from FY 2021 to FY 2022		FY 2022 Program
		Price Growth	Program Growth		Price Growth	Program Growth	
101 EXEC, GEN'L & SPEC SCHEDS	4,648,023	71,580	-108,048	4,611,555	104,682	66,696	4,782,933
103 WAGE BOARD	99,870	1,538	-7,663	93,745	2,128	11,918	107,791
104 FN DIRECT HIRE (FNDH)	39,229	604	-7,268	32,565	739	-63	33,241
105 SEPARATION LIABILITY (FNDH)	1,255	19	-19	1,255	28	-28	1,255
107 VOLUNTARY SEP INCENTIVES	842	13	-13	842	19	-19	842
0199 TOTAL CIVILIAN PERSONNEL COMPENSATION	4,789,219	73,754	-123,011	4,739,962	107,596	78,504	4,926,062
308 TRAVEL OF PERSONS	53,862	1,077	14,302	69,241	1,316	1,422	71,979
0399 TOTAL TRAVEL	53,862	1,077	14,302	69,241	1,316	1,422	71,979
401 DLA ENERGY (FUEL PRODUCTS)	421	-21	-124	276	28	-72	232
402 SERVICE FUND FUEL	10	-1		9	1	-1	9
411 ARMY SUPPLY	0	0	450	450	37	13	500
412 NAVY MANAGED SUPPLY, MATL	711	29	-188	552	46	-42	556
416 GSA SUPPLIES & MATERIALS	10,364	207	-2,635	7,936	151	-56	8,031
417 LOCAL PURCH SUPPLIES & MAT	62,870	1,257	-33,495	30,632	582	-4,760	26,454
422 DLA MAT SUPPLY CHAIN (MEDICAL)	22,964	32	-5,613	17,383	35	-615	16,803
0499 TOTAL DEFENSE WORKING CAPITAL FUND SUPPLIES AND MATERIALS	97,340	1,503	-41,605	57,238	880	-5,533	52,585
502 ARMY FUND EQUIPMENT	373	15	121	509	41	708	1,258
503 NAVY FUND EQUIPMENT	132	5	44	181	15	-16	180
505 AIR FORCE FUND EQUIP	33,891	0	-33,891	0	0	0	0
506 DLA MAT SUPPLY CHAIN (CONST & EQUIP)	139		50	189	4	-6	187
507 GSA MANAGED EQUIPMENT	5,965	119	2,511	8,595	163	-141	8,617
0599 TOTAL DEFENSE WORKING CAPITAL FUND EQUIPMENT PURCHASES	40,500	139	-31,165	9,474	223	545	10,242
601 ARMY INDUSTRIAL OPERATIONS	203	0	-50	153	14	-167	0
611 NAVY SURFACE WARFARE CTR	4,974	405	-4,642	737	7	-6	738

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

	FY 2020 <u>Program</u>	Change from FY 2020 to FY 2021		FY 2021 <u>Program</u>	Change from FY 2021 to FY 2022		FY 2022 <u>Program</u>
		<u>Price Growth</u>	<u>Program Growth</u>		<u>Price Growth</u>	<u>Program Growth</u>	
614 SPACE & NAVAL WARFARE CENTER	20	1	-21	0	0	0	0
633 DLA DOCUMENT SERVICES	19,748	128	-18,278	1,598	25	-26	1,597
634 NAVFEC (UTILITIES AND SANITATION)	20	0	-20	0	0	0	0
635 NAVY BASE SUPPORT (NAVFEC OTHER SUPPORT SERVICES)	20	0	-20	0	0	0	0
671 DISA DISN SUBSCRIPTION SERVICES (DSS)	80	4	-84	0	0	0	0
675 DLA DISPOSITION SERVICES	20	0	-20	0	0	0	0
677 DISA TELECOMM SVCS - REIMBURSABLE	19	0	54	73	0	-20	53
679 COST REIMBURSABLE PURCHASE	20	0	-20	0	0	0	0
682 INDUSTRIAL MOB CAPACITY	0	0	250	250	5	-255	0
692 DFAS FINANCIAL OPERATIONS (NAVY)	2,340	162	-2,502	0	0	0	0
693 DFAS FINANCIAL OPERATIONS (AIR FORCE)	693	120	-813	0	0	0	0
0699 TOTAL OTHER FUND PURCHASES	28,157	820	-26,166	2,811	51	-474	2,388
706 AMC CHANNEL PASSENGER	79	1	-80	0	0	0	0
707 AMC TRAINING	717	-47	-670	0	0	0	0
719 SDDC CARGO OPS-PORT HNDLG	45	-12	-12	21	6	-6	21
771 COMMERCIAL TRANSPORT	8,250	165	390	8,805	167	-10	8,962
0799 TOTAL TRANSPORTATION	9,091	107	-372	8,826	173	-16	8,983
901 FOREIGN NATIONAL INDIRECT HIRE (FNIH)	31,167	623	163	31,953	725	-60	32,618
902 SEPARATION LIAB (FNIH)	20	0	-20	0	0	0	0
912 RENTAL PAYMENTS TO GSA (SLUC)	723	14	-708	29	1	-1	29
913 PURCHASED UTILITIES (NON-FUND)	432	9	-441	0	0	0	0
914 PURCHASED COMMUNICATIONS (NON-FUND)	5,763	115	-5,121	757	14	-5	766
915 RENTS (NON-GSA)	16,696	334	-3,522	13,508	257	-58	13,707
917 POSTAL SERVICES (U.S.P.S)	1,576	32	-470	1,138	22	1	1,161
920 SUPPLIES & MATERIALS (NON-FUND)	595,026	23,206	-178,765	439,467	8,350	-97,467	350,350
921 PRINTING & REPRODUCTION	4,939	99	-2,121	2,917	55	558	3,530

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

	FY 2020 Program	Change from FY 2020 to FY 2021		FY 2021 Program	Change from FY 2021 to FY 2022		FY 2022 Program
		Price Growth	Program Growth		Price Growth	Program Growth	
922 EQUIPMENT MAINTENANCE BY CONTRACT	201,276	4,026	-64,485	140,817	2,676	-4,750	138,743
923 FACILITIES SUST, REST, & MOD BY CONTRACT	259,532	5,191	-122,448	142,275	2,703	-59,903	85,075
924 PHARMACEUTICAL DRUGS	1,457,580	56,846	56,044	1,570,470	61,248	35,982	1,667,700
925 EQUIPMENT PURCHASES (NON-FUND)	317,098	12,367	-57,278	272,187	5,172	83,662	361,021
926 OTHER OVERSEAS PURCHASES	748	15	-763	0	0	0	0
932 MGT PROF SUPPORT SVCS	146,693	2,934	-135,568	14,059	267	-936	13,390
933 STUDIES, ANALYSIS & EVAL	91,113	1,822	-85,736	7,199	137	-1,021	6,315
934 ENGINEERING & TECH SVCS	49	1	-50	0	0	0	0
936 TRAINING AND LEADERSHIP DEVELOPMENT (OTHER CONTRACTS)	67	1	-68	0	0	0	0
937 LOCALLY PURCHASED FUEL (NON-FUND)	441	9	-87	363	7	-7	363
955 OTHER COSTS (MEDICAL CARE)	381,576	14,881	-90,943	305,514	11,915	-20,154	297,275
957 OTHER COSTS (LAND AND STRUCTURES)	786	16	-802	0	0	0	0
959 OTHER COSTS (INSURANCE CLAIMS/INDMNTIES)	1,204	24	-1,228	0	0	0	0
960 OTHER COSTS (INTEREST AND DIVIDENDS)	1	0	-1	0	0	0	0
964 OTHER COSTS (SUBSISTENCE AND SUPPORT OF PERSONS)	10,451	209	-8,174	2,486	47	3	2,536
984 EQUIPMENT CONTRACTS	0	0	500	500	10	-510	0
985 RESEARCH & DEVELOPMENT, CONTRACTS	17,654	0	-17,654	0	0	0	0
986 MEDICAL CARE CONTRACTS	956,329	37,297	146,813	1,140,439	44,477	420,288	1,605,204
987 OTHER INTRA-GOVT PURCH	99,297	1,986	-89,249	12,034	229	15,809	28,072
988 GRANTS	4,297	86	-3,510	873	17	478	1,368
989 OTHER SERVICES	94,652	1,893	-21,855	74,690	1,419	-52,178	23,931
990 IT CONTRACT SUPPORT SERVICES	123,061	2,461	-113,326	12,196	232	2,183	14,611
991 FOREIGN CURRENCY VARIANCE	-336	-7	343	0	0	0	0
0999 TOTAL OTHER PURCHASES	4,819,911	166,490	-800,530	4,185,871	139,980	321,915	4,647,765
9999 GRAND TOTAL	9,838,080	243,890	-1,008,547	9,073,423	250,219	396,363	9,720,004

1. FY 2022 Program, OP-32A line 986, Medical Care Contracts includes \$282,800K for DHP COVID-19 Pandemic Response funds for testing and vaccine booster support.

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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 healthcare services provided in the private sector. This includes the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS) Program, the TRICARE Managed Care Support Contracts (MCSC), the Uniformed Services Family Health Program (USFHP), the TRICARE Overseas Program (TOP), the Supplemental Care Program, 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: healthcare 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 healthcare 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 healthcare 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 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 Care 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, 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 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.

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

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I. Description of Operations Financed: (Cont.)

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 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. Effective January 1, 2018 Defense Health Agency simplified the benefit structure of TRICARE as two options, PRIME (HMO like) or Select, the new Preferred Provider option (PPO). The long standing TRICARE Standard and Extra options both transition to the Select option. 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.

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III. Financial Summary (\$ in Thousands):

	FY 2020	Budget	FY 2021			Current	FY 2022
			Congressional Action				
A. BA Subactivities	<u>Actuals</u>	<u>Request</u>	<u>Amount</u>	<u>Percent</u>	<u>Appropriated</u>	<u>Estimate</u>	<u>Request</u>
1. Pharmaceuticals Purchased Health Care	\$889,409	\$822,222	\$-1,046	-0.13%	\$821,176	\$970,033	\$924,136
2. National Retail Pharmacy	\$1,085,340	\$994,926	\$20,632	2.07%	\$1,015,558	\$1,128,138	\$1,167,994
3. Managed Care Support Contracts	\$6,727,943	\$6,052,019	\$153,912	2.54%	\$6,205,931	\$7,095,545	\$7,430,699
4. MTF Enrollee Purchased Care	\$2,900,054	\$3,505,298	\$-53,484	-1.53%	\$3,451,814	\$2,927,494	\$3,451,422
5. Dental Purchased Care	\$291,234	\$297,791	\$7,822	2.63%	\$305,613	\$293,867	\$338,242
6. Uniformed Services Family Health Program	\$568,018	\$594,611	\$0	0.00%	\$594,611	\$586,956	\$609,276
7. Supplemental Care - Health Care	\$1,487,356	\$1,537,278	\$30,122	1.96%	\$1,567,400	\$1,599,500	\$1,800,774
8. Supplemental Care - Dental	\$113,435	\$96,915	\$2,003	2.07%	\$98,918	\$105,548	\$109,812
9. Continuing Health Education/Capitalization	\$335,029	\$344,021	\$0	0.00%	\$344,021	\$382,095	\$470,703
10. Overseas Purchased Health Care	\$358,592	\$251,463	\$6,517	2.59%	\$257,980	\$367,374	\$386,917
11. Miscellaneous Purchased Health Care	\$1,011,405	\$1,220,432	\$0	0.00%	\$1,220,432	\$1,089,838	\$1,291,771
12. Miscellaneous Support Activities	\$138,881	\$124,911	\$0	0.00%	\$124,911	\$112,283	\$110,933
Total	\$15,906,696	\$15,841,887	\$166,478	1.05%	\$16,008,365	\$16,658,671	\$18,092,679

2. FY 2020 actuals includes \$287,487K for OCO.
3. FY 2020 actuals includes \$1,095,500K non-COVID-19 CARES Act supplemental funding.
4. FY 2020 actuals includes \$82,000K for Family First Funding. This funding is 3-year Operation and Maintenance funding.
5. FY 2020 actuals includes \$54,681K CARES Act COVID funding.
6. FY 2020 actuals excludes Department of Defense Medicare-Eligible Retiree Health Care Fund (MERHCF) of \$8,274,700K (O&M Only).
7. FY 2021 current estimate includes \$650,245K fact-of-life increase attributed to COVID-19 Pandemic healthcare claims.
8. FY 2021 current estimate includes \$296,828K for OCO.
9. FY 2021 current estimate excludes anticipated Department of Defense Medicare-Eligible Retiree Health Care Fund (MERHCF) of \$8,460,786K (O&M Only).
10. FY 2022 current estimate includes \$188,223K for Direct War Costs Accounted For In The Base (formerly OCO).
11. FY 2022 current estimate excludes anticipated Department of Defense Medicare-Eligible Retiree Health Care Fund (MERHCF) of \$9,088,300K (O&M Only).

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

<u>B. Reconciliation Summary</u>	<u>Change FY 2021/FY 2021</u>	<u>Change FY 2021/FY 2022</u>
BASELINE FUNDING	\$15,841,887	\$16,658,671
Congressional Adjustments (Distributed)	166,478	
Congressional Adjustments (Undistributed)	0	
Adjustments to Meet Congressional Intent	0	
Congressional Adjustments (General Provisions)	0	
SUBTOTAL APPROPRIATED AMOUNT	16,008,365	
Fact-of-Life Changes (2021 to 2021 Only)	650,245	
SUBTOTAL BASELINE FUNDING	16,658,610	
Supplemental	0	
Reprogrammings	0	
Price Changes		647,448
Functional Transfers		0
Program Changes		786,560
CURRENT ESTIMATE	16,658,610	18,092,679
Less: Wartime Supplemental	0	
NORMALIZED CURRENT ESTIMATE	\$16,658,610	\$18,092,679

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 Private Sector Care OP-5 Exhibit**

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

FY 2021 President's Budget Request (Amended, if applicable)	\$15,841,887
1. Congressional Adjustments	\$166,478
a) Distributed Adjustments	\$166,478
1) Excess Growth - Medical Reform Implementation	\$-114,000
2) Excess Growth - Pharmaceutical Drugs	\$-16,350
3) Overseas Contingency Operations Funds Enacted for Direct War Costs:	\$296,828
b) Undistributed Adjustments	\$0
c) Adjustments to Meet Congressional Intent.....	\$0
d) General Provisions	\$0
FY 2021 Appropriated Amount	\$16,008,365
2. War-Related and Disaster Supplemental Appropriations.....	\$0
a) OCO Supplemental Funding	\$0
3. Fact-of-Life Changes.....	\$650,245
a) Functional Transfers.....	\$0
b) Technical Adjustments	\$0

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

c) Emergent Requirements.....	\$650,245
1) Program Increases	\$650,245
a) One-Time Costs	\$0
b) Program Growth	\$650,245
i) FY 2021 Private Sector Care Shortfall:	\$650,245
Resources required in FY 2021 for Private Sector Care as claims are anticipated to exceed \$1 billion for care attributed to the COVID-19 pandemic. Current execution in support of COVID-19 was \$678 million as of 31 March 2021. FY 2021 projected Fact-of-Life requirement of \$650 million considers that the anticipated costs will be offset by continued suppression of elective and non-urgent care during the pandemic.	
FY 2021 Baseline Funding.....	\$16,658,610
4. Reprogrammings (Requiring 1415 Actions)	\$0
a) Increases.....	\$0
b) Decreases	\$0
Revised FY 2021 Estimate	\$16,658,610
5. Less: Item 2, War-Related and Disaster Supplemental Appropriation and Item 4, Reprogrammings	\$0
a) Less: OCO Supplemental Funding.....	\$0
FY 2021 Normalized Current Estimate	\$16,658,610

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

6. Price Change	\$647,448
7. Functional Transfers.....	\$0
a) Transfers In	\$0
b) Transfers Out	\$0
8. Program Increases.....	\$873,960
a) Annualization of New FY 2021 Program	\$0
b) One-Time FY 2022 Increases	\$0
c) Program Growth in FY 2022.....	\$873,960
1) a. COVID-19 Pandemic Response:.....	\$606,000
<p>Increase required to support continued COVID-19 testing and vaccine booster. The DoD COVID-19 Task Force and Federal Government infectious disease experts highlight the importance of testing to return to normal operations. In addition, experts have projected a need for annual COVID-19 vaccine booster shots. Funding support these requirements and also support for care expected to be pushed into FY 2022 for patients who were unable or unwilling to seek non-urgent medical care. COVID-19 is expected to have a lasting impact on a portion of the DoD beneficiary population. This funding considers these assumptions and supports the Biden Administration's priorities to move quickly to contain the COVID-19 Pandemic and inoculate the United States population efficiently and equitably. The FY 2021 Private Sector Care baseline funding is \$15,711,537K.</p>	
2) b. Private Sector Care Baseline Requirements NHE Inflation Increase:.....	\$191,432
<p>Baseline increase for Private Sector Care (PSC) attributed to National Health Expenditure (NHE) inflationary growth of 4.97% applied to the FY 2021 estimate for healthcare projected for FY 2022. The increase is offset by the 3.8% inflation factor already included in the price growth seen in section OP-32A. Funds in the amount of \$191,432K represent the 1.17% delta. The FY 2021 Private Sector Care baseline funding is \$15,711,537K.</p>	

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

3) c. Continuing Health Education/Capitalization of Assets Program (CHE/CAP):\$69,618

Increase funding for CHE/CAP based estimated increase in in-patient workload assumed in the Private Sector Care program. The CHE/CAP program provides for support of graduate medical education and capital investments within civilian facilities. Payments to civilian medical facilities are dependent on the number of inpatient bed days incurred by TRICARE beneficiaries in those hospital settings. The volume of inpatient claims increased significantly in FY 2020 and is assumed to continue this growth above inflation into FY 2022 requiring a baseline increase. The FY 2021 CHE/CAP baseline funding is \$344,021K.

4) d. E-Commerce Sustainment:\$3,498

Funds realigned to DHP Operation and Maintenance, Private Sector Care (+\$3,498K) from DHP Research, Development, Test & Evaluation (RDT&E) for E-Commerce sustainment. E-Commerce is a program that provides software applications to fulfill accounting, budgeting, solicitation, contracting, payment, and operational support for the Private Sector Care (PSC) programs. Under the purview of the E-Commerce program, the Oracle Federal Financials application processes approximately 200 million healthcare claims a year for accuracy and payment. Development activities will be completed in FY 2021 and move into sustainment appropriately requiring O&M funds. The FY 2021 E-Commerce Operation and Maintenance baseline funding request is zero.

5) e. Overseas Health Care:\$3,412

Increase funds for the administrative fees associated with the Overseas Health Care that was reduced in FY 2021 in error. The FY 2021 Overseas Health Care baseline funding request is \$251,463K.

6) f. Direct War Costs Accounted For In The Base:\$0

Direct War Costs of \$188,223K is included in the FY 2022 Private Sector Care baseline request. This 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. The TRICARE Reserve Select program, offered to RC members who enroll and share premiums with the government, is not included in this requirement. The FY 2021 Private Sector Care baseline funding is \$15,711,537K.

9. Program Decreases\$-87,400

a) Annualization of FY 2021 Program Decreases\$0

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

b) One-Time FY 2021 Increases\$0

c) Program Decreases in FY 2022\$-87,400

1) a. Pharmaceutical Drugs Reduction:.....\$-79,400

Reduced requirements in Private Sector Care Pharmaceutical Drugs to account for increase in Pharmaceutical copay levels set by the National Defense Authorization Act of FY 2018 for January 2022. Copays for retail generic will increase 8%, retail brand name will increase 15%, mail order generic will increase 20% and mail order brand name will increase 17%. These increases will result in a larger offset to the net government costs for prescriptions filled in the Retail and Mail points of service. The FY 2021 Pharmaceutical Drugs baseline budget is \$1,836,734K.

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

Reduces resources for FY 2022 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 Private Sector Care (PSC) charges and execute these funds in the Defense Health Program (DHP) appropriation. Previous to this authority, TRICARE was reliant 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 2021 Private Sector Care baseline budget is \$15,711,537K.

FY 2022 Budget Request\$18,092,679

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IV. Performance Criteria and Evaluation Summary:

	FY 2020 <u>Actual</u>	FY 2021 <u>Estimate</u>	FY 2022 <u>Estimate</u>	FY 2020 - 2021 <u>Change</u>	FY 2021 - 2022 <u>Change</u>
Private Sector Care Enrollment:					
PSC TRICARE Prime Enrollees	1,326,336	1,307,736	1,306,833	-18,600	-903
PSC TRICARE Select Enrollees	2,035,310	1,992,600	1,986,373	-42,710	-6,227
TRICARE Overseas Enrollees	<u>417,416</u>	<u>420,016</u>	<u>420,259</u>	<u>2,600</u>	<u>243</u>
Total MCS and Overseas:	3,779,062	3,720,352	3,713,465	-58,710	-6,887
TRICARE Dental Program Enrollment	683,768	686,704	689,652	2,936	2,948
Uniformed Services Family Health Plan	98,690	99,058	99,428	368	370
Private Sector Care System					
Workload:					
	FY 2020 <u>Actual</u>	FY 2021 <u>Estimate</u>	FY 2022 <u>Estimate</u>	FY 2020 - 2021 <u>Change</u>	FY 2021 - 2022 <u>Change</u>
Outpatient-Visits	69,005,132	65,701,683	72,337,650	-3,303,449	6,635,967
Outpatient-Weighted (Relative Value Units, RVUs)	122,662,003	116,789,865	128,585,813	-5,872,138	11,795,948
Inpatient-Admissions	294,637	280,532	308,867	-14,105	28,335
Inpatient-Weighted (Relative Weighted Products, RWPs)	282,503	268,978	296,146	-13,525	27,168
30-Day Equivalent Prescriptions:					
Pharmacy-Retail	23,591,490	23,571,982	24,284,365	-19,508	712,383
Pharmacy-Mail Order	<u>11,505,950</u>	<u>12,106,469</u>	<u>11,424,712</u>	<u>600,519</u>	<u>-681,757</u>
Pharmacy-Total PSC	35,097,441	36,691,486	35,305,147	581,011	30,626

General Notes:

1. All data excludes MERHCF and Dual Eligibles (TDEF).
2. Workload is all workload provided in Private Sector locations regardless of patient's enrollment status. Prime enrollment, Select and Non-enrolled exclude TRICARE For Life (TFL). Prime enrollment are to Managed Care contractor (not Military Treatment Facility). Source M2 (DEERS).
3. Enrollment is to PSC MCS providers and Overseas Program not to the Military Treatment Facilities.

Workload Notes:

1. FY 2020 PSC workload includes OCO and baseline in actuals reported.
2. FY 2021 and FY 2022 CONUS and OCONUS health care workload projections are non-OCO and based on non-OCO population trends for TRICARE Prime and all others.
3. OCO estimated at 1% of total workload in East, West and Overseas (roughly 97K OCO divided by roughly 9.7M TRICARE eligibles).
4. FY 2021 and FY 2022 workload estimates are based on FY 2020 and adjusted to account for population growth and NHE current growth rates. Estimate assumes significant growth in healthcare workload in FY 2021 as beneficiaries catch up on care deferred due to COVID-19.
5. FY 2021 Pharmacy projection of script growth uses eligible population trends and percentage increase in script volume from FY 2019 to FY 2020.
6. FY 2022 Pharmacy projection of script growth uses eligible population change.
7. Dental enrollment estimates for FY 2021 and FY 2022 are based on rate of change from FY 2019 to FY 2020.

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V. Personnel Summary:

	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>Change FY 2020/ FY 2021</u>	<u>Change FY 2021/ FY 2022</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 2020 Program	Change from FY 2020 to FY 2021		FY 2021 Program	Change from FY 2021 to FY 2022		FY 2022 Program
		Price Growth	Program Growth		Price Growth	Program Growth	
308 TRAVEL OF PERSONS	452	9	38	499	9	1	509
0399 TOTAL TRAVEL	452	9	38	499	9	1	509
647 DISA ENTERPRISE COMPUTING CENTERS	0	0	10,331	10,331	0	217	10,548
0699 TOTAL OTHER FUND PURCHASES	0	0	10,331	10,331	0	217	10,548
707 AMC TRAINING	1		-1	0	0	0	0
0799 TOTAL TRANSPORTATION	1	0	-1	0	0	0	0
920 SUPPLIES & MATERIALS (NON-FUND)	44	1	-38	7	0		7
921 PRINTING & REPRODUCTION	840	17	4,819	5,676	108	11	5,795
924 PHARMACEUTICAL DRUGS	1,932,933	75,384	89,854	2,098,171	81,829	-87,870	2,092,130
925 EQUIPMENT PURCHASES (NON-FUND)	15,810	316	-12,328	3,798	72	8	3,878
932 MGT PROF SUPPORT SVCS	26,253	525	28,840	55,618	1,057	3,078	59,753
933 STUDIES, ANALYSIS & EVAL	4,618	92	408	5,118	97	-67	5,148
934 ENGINEERING & TECH SVCS	8,686	174	-8,860	0	0	0	0
955 OTHER COSTS (MEDICAL CARE)	13,565	529	-14,094	0	0	0	0
959 OTHER COSTS (INSURANCE CLAIMS/INDMNTIES)	48	1	-46	3	0		3
986 MEDICAL CARE CONTRACTS	13,837,404	539,659	81,233	14,458,296	563,874	872,416	15,894,586
987 OTHER INTRA-GOVT PURCH	5,635	113	12,611	18,359	349	-1,240	17,468
989 OTHER SERVICES	48,366	967	-46,538	2,795	53	6	2,854
990 IT CONTRACT SUPPORT SERVICES	12,041	241	-12,282	0	0	0	0
0999 TOTAL OTHER PURCHASES	15,906,243	618,019	123,579	16,647,841	647,439	786,342	18,081,622
9999 GRAND TOTAL	15,906,696	618,028	133,947	16,658,671	647,448	786,560	18,092,679

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**Defense Health Program
Operation and Maintenance, Defense-Wide
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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
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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 2021						
	FY 2020	Budget	Congressional Action			Current	FY 2022
			Request	Amount	Percent		
<u>A. BA Subactivities</u>	<u>Actuals</u>	<u>Request</u>	<u>Amount</u>	<u>Percent</u>	<u>Appropriated</u>	<u>Estimate</u>	<u>Request</u>
1. Examining Activities	\$101,522	\$14,886	\$-3,950	-26.53%	\$10,936	\$10,936	\$10,992
2. Other Health Activities	\$458,129	\$381,356	\$-5,884	-1.54%	\$375,472	\$375,472	\$417,122
3. Military Public / Occupational Health	\$545,594	\$456,687	\$1,552	0.34%	\$458,239	\$458,239	\$615,913
4. Veterinary Services	\$30,184	\$2,921	\$720	24.65%	\$3,641	\$3,641	\$3,723
5. Military Unique-Other Medical Activities	\$764,108	\$453,112	\$-994	-0.22%	\$452,118	\$452,118	\$460,106
6. Aeromedical Evacuation System	\$72,258	\$2,579	\$2,224	86.23%	\$4,803	\$4,803	\$2,470
7. Service Support to Other Health Activities- TRANSCOM	\$873	\$691	\$0	0.00%	\$691	\$691	\$479
8. Joint Pathology Center	\$48,732	\$23,977	\$5,130	21.40%	\$29,107	\$29,107	\$28,280
9. Support to FACA Advisory Board Activities	<u>\$6,451</u>	<u>\$2,060</u>	<u>\$0</u>	<u>0.00%</u>	<u>\$2,060</u>	<u>\$2,060</u>	<u>\$2,037</u>
Total	\$2,027,851	\$1,338,269	\$-1,202	-0.09%	\$1,337,067	\$1,337,067	\$1,541,122

1. FY 2020 actuals includes \$2,800K for Overseas Contingency Operations (OCO).

2. FY 2020 actuals includes \$199,914K CARES Act COVID-19 funding.

3. FY 2020 actuals includes +\$64,778K reprogrammed from Base Operations (+\$60,511K) and IMIT (+\$4,633K) to Consolidated Health Support, in addition to, funding reprogrammed from Consolidated Health Support to Education and Training travel requirements (-\$366K).

4. FY 2021 estimate includes \$3,198K for OCO.

5. FY 2022 estimate includes \$525K for Direct War Costs (formerly OCO).

6. The Department of Defense transferred O&M funding of \$127,000K in FY 2020 and will transfer \$137,000K in FY 2021 and \$137,000K in FY 2022 to 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 (National Defense Authorization Act for FY 2010). Additionally, the Department of Defense transferred \$15,000K of O&M funding in FY 2020 and will transfer the same amount in FY 2021 and FY 2022 to the DoD-VA Health Care 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).

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

<u>B. Reconciliation Summary</u>	<u>Change FY 2021/FY 2021</u>	<u>Change FY 2021/FY 2022</u>
BASELINE FUNDING	\$1,338,269	\$1,337,067
Congressional Adjustments (Distributed)	-1,202	
Congressional Adjustments (Undistributed)	0	
Adjustments to Meet Congressional Intent	0	
Congressional Adjustments (General Provisions)	0	
SUBTOTAL APPROPRIATED AMOUNT	1,337,067	
Fact-of-Life Changes (2021 to 2021 Only)	0	
SUBTOTAL BASELINE FUNDING	1,337,067	
Supplemental	0	
Reprogrammings	0	
Price Changes		35,817
Functional Transfers		1,061
Program Changes		167,177
CURRENT ESTIMATE	1,337,067	1,541,122
Less: Wartime Supplemental	0	
NORMALIZED CURRENT ESTIMATE	\$1,337,067	\$1,541,122

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

FY 2021 President's Budget Request (Amended, if applicable)	\$1,338,269
1. Congressional Adjustments	\$-1,202
a) Distributed Adjustments	\$-1,202
1) Historical Under-execution	\$-25,400
2) Overseas Contingency Operations Funds Enacted for Direct War Costs:	\$3,198
3) Program Increase - Armed forces medical examiner DNA testing to support POW/MIA efforts	\$4,000
4) Program Increase - Digital hearing records	\$2,000
5) Program Increase - Therapeutic Service Dog Training	\$11,000
6) Program Increase Sexual Trauma Treatment Pilot Program	\$4,000
b) Undistributed Adjustments	\$0
c) Adjustments to Meet Congressional Intent	\$0
d) General Provisions	\$0
FY 2021 Appropriated Amount	\$1,337,067
2. War-Related and Disaster Supplemental Appropriations	\$0
a) OCO Supplemental Funding	\$0

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

1) OCO	\$0
FY 2020 Overseas Contingency Operations request.	
3. Fact-of-Life Changes.....	\$0
a) Functional Transfers.....	\$0
b) Technical Adjustments	\$0
c) Emergent Requirements.....	\$0
FY 2021 Baseline Funding.....	\$1,337,067
4. Reprogrammings (Requiring 1415 Actions).....	\$0
a) Increases.....	\$0
b) Decreases	\$0
Revised FY 2021 Estimate	\$1,337,067
5. Less: Item 2, War-Related and Disaster Supplemental Appropriation and Item 4, Reprogrammings	\$0
a) Less: OCO Supplemental Funding.....	\$0
FY 2021 Normalized Current Estimate	\$1,337,067
6. Price Change	\$35,817
7. Functional Transfers	\$1,061

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

a) Transfers In		\$1,061
1) Operation Live Well (OLW) Initiative Transfer:		\$1,061
Transfers remaining funding for the Operation Live Well (OLW) Initiative from the Office of the Under Secretary of Defense for Personnel and Readiness (OUSD P & R) to the Defense Health Agency's Public Health Division. OLW formulates concurrent Department of Defense strategies for optimizing Total Force Fitness (TFF) doctrine for all three military components in support of Combatant Commands OLW, through the development of analytic performance measures and policy formulation. The Operation Live Well Initiative aims to identify effective TFF initiatives and aligns the Military Departments' policies and business practices to improve the warrior capability and capacity across the Department of Defense community. Funding will measurably improve human performance optimization and readiness of the Total Force through addressing eight domains of fitness via data-informed and synchronized policy, programs, and business practices. The FY 2021 Operation Live Well (OLW) Initiative baseline funding is \$8,500K.		
b) Transfers Out		\$0
8. Program Increases		\$175,188
a) Annualization of New FY 2021 Program		\$0
b) One-Time FY 2022 Increases		\$0
c) Program Growth in FY 2022		\$175,188
1) a. DHP COVID-19 Pandemic Response:		\$146,615
Funds requirements for enhanced Public Health Surveillance (+\$46.6 million), continued contact tracing testing and screening (+\$100.0 million), and continued efforts to identify variants in order to prevent the further spread of SARS-CoV-2. Funds also support evaluation of long-term effectiveness of vaccination efforts and support the Administration's priorities to move quickly to contain the COVID-19 Pandemic and inoculate the United States population efficiently and equitably. The FY 2021 Consolidated Health Support baseline funding is \$1,337,067K.		

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

- 2) b. Increased Requirements in Consolidated Health Support at the Defense Health Agency:.....\$7,467
Increases funding at the Defense Health Agency based upon projected requirements in Consolidated Health Support Budget Activity Group. Funds support increased hazard exposure surveillance and training requirements; increased supply costs associated with the operation of 20 blood centers to include blood typing anti-sera and other testing reagents, donor unit collection bags shipping containers and other consumable supplies required in the production of blood products; as well as increased contract provider support needed to augment the GS/MIL performing disability evaluation physicals. The FY 2021 Consolidated Health Support baseline funding is \$1,337,067K.
- 3) c. Federal Employee Retirement System – Agency Contribution Rate Assumption:\$4,495
Increases civilian personnel costs to reflect the revised Federal Employee Retirement System (FERS) Agency Contribution for FY 2022 in accordance with Office of Management and Budget (OMB) Circular No. A-11. The FERS FY 2022 regular employee rate is 18.4% percent, which is a 1.1% increase above the FY 2021 rate of 17.3% percent. The FY 2021 Consolidated Health Support baseline funding is \$1,337,869K. The FY 2021 Consolidated Health Support baseline civilian staffing is 4,540 FTEs.
- 4) d. Fiscal Year 2022 Performance Awards:\$3,443
Increases the FY 2022 civilian personnel awards budget at the aggregate level for General Schedule (GS) and Wage Grade (WG) employees in accordance with the Office of Management and Budget (OMB) Circular No. A-11 direction to increase civilian awards spending by no less than one (1) percentage point of FY 2020 GS and WG salary spending. Increase reflects additional civilian award funding of one (1) percentage point of the GS and WG salary spending above the FY 2020 awards budget of 1.5%. The FY 2021 Consolidated Health Support baseline funding is \$1,337,869K. The FY 2021 Consolidated Health Support baseline civilian staffing is 4,540 FTEs.
- 5) e. Civilian Pay Raise Assumptions:\$1,908
Increase required to fund civilian personnel costs for the net effect of the Civilian Pay Raise Assumptions which was increased from 1.0% to 2.7%. The FY 2021 Consolidated Health Support baseline funding is \$1,337,869K. The FY 2021 Consolidated Health Support baseline civilian staffing is 4,540 FTEs.
- 6) f. Financial Establishment of Defense Health Agency Safety Program:.....\$907
Realigns 4 civilian FTEs, civilian salaries, and associated costs for travel, supplies and contracts to Consolidated Health Support Budget Activity Group from Education and Training Budget Activity Group (-\$114K; 1 FTE) and Management Activities Budget Activity Group (-\$793K; 3 FTEs) to establish the Defense Health Agency’s Safety Program. The FY 2021 Consolidated Health Support baseline funding is \$1,337,869K.

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

7) g. Clinical Investigations Program Realigned to the Defense Health Agency:\$10,353
 Realigns the Clinical Investigations Program (CIP) and Science & Technology (S&T) program and associated resources to the Consolidated Health Support Budget Activity Group (BAG) from Base Operations/Communications BAG (-\$3,795K) and In-House Care BAG (-\$6,558K) to consolidate the program under the authority, direction and control of the Defense Health Agency. Funding for non-pay requirements were realigned to the Defense Health Agency to support execution of the program in accordance with DoDI 6000.08. The CIP and S&T establish, assign and provide procedures for funding and administration of Research and Clinical Investigation Programs funded by the Defense Health Program (DHP) appropriation. It is an essential component of medical care and teaching and supports the Graduate Health Sciences Education and other health programs of the Military Services. The program also supports development and employment of health readiness solutions that protect, treat and optimize the health and performance of the total force . The FY 2021 Consolidated Health Support baseline funding is \$1,337,869K.

8) h. Direct War Costs Accounted For In The Base:\$0
 Direct War Costs of \$525K is included in the FY 2022 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 2021 Consolidated Health Support baseline funding is \$1,337,869K.

9. Program Decreases\$-8,011

a) Annualization of FY 2021 Program Decreases\$0

b) One-Time FY 2021 Increases\$0

c) Program Decreases in FY 2022\$-8,011

1) a. Defense Health Program Reform Management - Travel Efficiencies:\$-3,561
 Reduces Consolidated Health Support funds through Military Health System enterprise-wide efforts to increase standardization. Funds were reduced in the Travel Program. The FY 2021 Consolidated Health Support baseline funding is \$1,337,869K.

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

2) b. Management Headquarters Reform:\$-2,357

Continues the implementation of the Military Health System organizational reforms required by the National Defense Authorization Acts of FY 2017 and FY 2019 focused on efforts to reduce redundant and unnecessary headquarters overhead while building a structure that drives improved outcomes for readiness, health, quality and cost. Reform efforts reduced the Defense Health Agency contract requirements in the Examining Activities (-\$285K), Military Public/Occupational Health (-\$685K), Military Unique - Other Medical (\$1,321K), support to FACA Advisory Board Activities (-\$66K) program elements. The FY 2021 Consolidated Health Support baseline funding is \$1,337,869K.

3) c. Cancer Registry Realigned to the Defense Health Agency:.....\$-1,580

Realigns the Cancer Registry program and funding from Consolidated Health Support, Joint Pathology Center program element to Information Management/Information Technology (IM/IT) (+\$1,580K) to consolidate the budget and execution of the DoD Cancer Registry information system application, database, and hosting at the Defense Health Agency. The Defense Health Agency is consolidating all non-pay IT healthcare mission resources within IM/IT. The FY 2021 Consolidated Health Support baseline funding is \$1,337,869K.

4) d. Information Technology Healthcare Mission Funding Realigned to the Defense Health Agency:.....\$-513

Realigns Information Technology Healthcare mission and funding from Consolidated Health Support Budget Activity Group (BAG) to Information Management/Information Technology (IM/IT) BAG (+\$513K) to account for the budgeting and execution of non-pay information technology (IT) healthcare resources at the Defense Health Agency. The Defense Health Agency is consolidating all non-pay IT healthcare mission resources within IM/IT. The FY 2021 Consolidated Health Support baseline funding is \$1,337,869K.

FY 2022 Budget Request\$1,541,122

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IV. Performance Criteria and Evaluation Summary:

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Estimate	Change FY 2020/2021	Change FY 2021/2022
1) Active Duty Force Structure	1,638,616	1,645,217	1,644,604	6,601	(613)
2) Military Entrance Processing Stations Workload (000's)	282	0	0	(282)	-
3) Spectacles/Inserts Fabricated (000's)	1682	1716	1749	34	33
4) Veterinary Lab Procedures (000's)	50	0	0	(50)	-

1) Active Duty Force Structure: The FY 2020 to FY 2021 and FY 2021 to FY 2022 changes in Active Duty Force Structure support Department of Defense's increase and decrease in Active Duty end strength from FY20-FY22.

2) Military Entrance Processing Stations Workload: The Military Entrance Processing Command (MEPCOM) USMEPCOM is seeing a reduction in overall visits to the MEPS as well as a reduction in Accessions due to COVID-19. There was an additional 6-8 weeks of reduced processing due to the Pandemic. From FY 2020 to FY 2022, a decrease of workload is being reported because funding for the Military Entrance Processing Stations transferred to the Department of the Army in FY 2021.

3) Spectacles/Inserts Fabricated: The FY 2020 to FY 2022 increase is due to a combination of historical workload growth (1%), a new patient directed/self-ordering solution, a Joint Spectacle Prescription Entry Cloud-based Solution (JSPECS), that is expected to come to fruition within the next two fiscal years. Once available, JSPECS will remove several access barriers to optical services for eligible DoD beneficiaries and thus further increase optical orders. We anticipate a 1% increase in the first year of JSPECS as version 1.0 will be limited to Active Duty (AD) orders only. As ensuing versions are rolled out we are forecasting a potential 1% increase in orders. Total increase per year is 2%.

4) Veterinary Lab Procedures: In FY 2020 Army Medical Command observed a decrease in food procedures and pathology submissions due to COVID-19 restrictions in movement, destination monitoring program, VTF visits, etc. The FY 2020 to FY 2022 decrease is the result of the Army's Veterinary Services funding transfer to the Department of the Army in FY 2021.

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V. Personnel Summary:

	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>Change FY 2020/ FY 2021</u>	<u>Change FY 2021/ FY 2022</u>
Active Military End Strength (E/S) (Total)	7,257	7,290	7,107	33	-183
Officer	1,980	2,116	2,045	136	-71
Enlisted	5,277	5,174	5,062	-103	-112
Active Military Average Strength (A/S) (Total)	7,185	7,274	7,199	89	-75
Officer	2,078	2,048	2,081	-30	33
Enlisted	5,107	5,226	5,118	119	-108
Civilian FTEs (Total)	8,269	4,536	4,540	-3,733	4
U.S. Direct Hire	7,280	4,019	4,023	-3,261	4
Foreign National Direct Hire	178	93	93	-85	0
Total Direct Hire	7,458	4,112	4,116	-3,346	4
Foreign National Indirect Hire	459	72	72	-387	0
Reimbursable Civilians	352	352	352	0	0
Average Annual Civilian Salary (\$ in thousands)	107.1	130.4	135.5	23.3	5.0
Contractor FTEs (Total)	2,997	2,917	2,816	-80	-101

Personnel Summary Explanations:

Explanation of changes in Active Military End Strength: The increase from FY 2020 to FY 2021 (+33) transfers to the Defense Health Agency for Major Headquarters Activities (Army: 80; Navy -48; Air Force: +1). The decrease from FY 2021 to FY 2022 (-183) includes the Tech Adjustment made by the military departments for the revised drawdown reductions (Army: +23; Navy: +3; Air Force: -209) and one other technical adjustment to correct PBD 733B2 (Army: -3).

Explanation of changes in Civilian FTEs: The decrease from FY 2020 to FY 2021 (-3,733) includes the 25% reduction to the Military Health System (MHS) major headquarters (-13: Army: -10, Air Force: -3); realignment of the Veterinary Services Information Management Systems to the Defense Health Agency, Information Management/Information Technology (-3); Army Medical Command Medical Headquarters transfer to the Department of the Army (-4); the transfer of Consolidated Health Support FTEs following the Defense Wide Review to the Department of the Army (-2,315), the Department of the Air Force (-338), and the Department of the Navy (-71); and Service headquarters execution and internal reprogramming adjustments (-989: Army: +380, Air Force: +48, Defense Health

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V. Personnel Summary: (Cont.)

Agency: -6, Direct Care Financial Management: -216, and Navy: -1195 for Common Cost Accounting Structure Realignment of FTEs to Consolidated Health Support from Base Operations and Communications Budget Activity Group). The net increase from FY 2021 to FY 2022 (+4) reflects an increase in civilian FTEs in support of section 702 of the FY 2017 National Defense Authorization Act at the Defense Health Agency.

Explanation of changes in Contractor FTEs: The decrease from FY 2020 to FY 2021 (-80) is accounted for in the Examining Activities program element (-184), Military Public/Occupational Health program element (+425), Other Health Activities program element (-111), Military Unique-Other Medical program element (-195), and Support to FACA Advisory Board Activities (-15). The decrease from FY 2021 to FY 2022 (-101) is accounted for in the Examining Activities program element (-1), Military Public/Occupational Health program element (+7), Other Health Activities program element (+66), and Military Unique-Other Medical program element (-173).

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

	FY 2020 Program	Change from FY 2020 to FY 2021		FY 2021 Program	Change from FY 2021 to FY 2022		FY 2022 Program
		Price Growth	Program Growth		Price Growth	Program Growth	
101 EXEC, GEN'L & SPEC SCHEDS	807,241	12,432	-290,912	528,761	12,003	6,321	547,085
103 WAGE BOARD	8,520	131	-2,627	6,024	137	2,153	8,314
104 FN DIRECT HIRE (FNDH)	11,333	175	-7,807	3,701	84	678	4,463
105 SEPARATION LIABILITY (FNDH)	231	4	-4	231	5	-5	231
107 VOLUNTARY SEP INCENTIVES	0	0	436	436	10	-10	436
121 PCS BENEFITS	11	0	-11	0	0	0	0
0199 TOTAL CIVILIAN PERSONNEL COMPENSATION	827,336	12,742	-300,925	539,153	12,239	9,137	560,529
308 TRAVEL OF PERSONS	23,095	462	-6,732	16,825	320	-3,243	13,902
0399 TOTAL TRAVEL	23,095	462	-6,732	16,825	320	-3,243	13,902
401 DLA ENERGY (FUEL PRODUCTS)	21	-1	-14	6	1	-1	6
402 SERVICE FUND FUEL	0	0	3	3	0		3
412 NAVY MANAGED SUPPLY, MATL	0	0	0	0	0	155	155
414 AIR FORCE CONSOL SUST AG (SUPPLY)	0	0	0	0	0	57	57
416 GSA SUPPLIES & MATERIALS	126	3	343	472	9	-5	476
417 LOCAL PURCH SUPPLIES & MAT	381	8	1,777	2,166	41	705	2,912
422 DLA MAT SUPPLY CHAIN (MEDICAL)	1,066	1	570	1,637	3	590	2,230
0499 TOTAL DEFENSE WORKING CAPITAL FUND SUPPLIES AND MATERIALS	1,594	11	2,679	4,284	54	1,501	5,839
503 NAVY FUND EQUIPMENT	23	1	2	26	2	-2	26
506 DLA MAT SUPPLY CHAIN (CONST & EQUIP)	0	0	0	0	0	156	156
507 GSA MANAGED EQUIPMENT	1	0	-1	0	0	0	0
0599 TOTAL DEFENSE WORKING CAPITAL FUND EQUIPMENT PURCHASES	24	1	1	26	2	154	182
601 ARMY INDUSTRIAL OPERATIONS	237	0	-237	0	0	0	0
633 DLA DOCUMENT SERVICES	65	0	-11	54	1	2	57
635 NAVY BASE SUPPORT (NAVFEC OTHER SUPPORT SERVICES)	12	0	-3	9	0	0	9

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

	FY 2020 <u>Program</u>	Change from FY 2020 to FY 2021		FY 2021 <u>Program</u>	Change from FY 2021 to FY 2022		FY 2022 <u>Program</u>
		<u>Price Growth</u>	<u>Program Growth</u>		<u>Price Growth</u>	<u>Program Growth</u>	
671 DISA DISN SUBSCRIPTION SERVICES (DSS)	14	1	-3	12	1	-1	12
675 DLA DISPOSITION SERVICES	574	0	-573	1	0	5	6
677 DISA TELECOMM SVCS - REIMBURSABLE	12	0	-12	0	0	0	0
679 COST REIMBURSABLE PURCHASE	5,331	0	-5,328	3	0	0	3
680 BUILDING MAINT FUND PURCH	0	0	364	364	4	3	371
692 DFAS FINANCIAL OPERATIONS (NAVY)	619	43	-662	0	0	0	0
0699 TOTAL OTHER FUND PURCHASES	6,864	44	-6,465	443	6	9	458
706 AMC CHANNEL PASSENGER	38,241	688	-37,059	1,870	36	-1,906	0
707 AMC TRAINING	99	-7	-92	0	0	0	0
719 SDDC CARGO OPS-PORT HNDLG	524	-141	-383	0	0	142	142
771 COMMERCIAL TRANSPORT	4,506	90	-3,091	1,505	29	-7	1,527
0799 TOTAL TRANSPORTATION	43,370	630	-40,625	3,375	65	-1,771	1,669
901 FOREIGN NATIONAL INDIRECT HIRE (FNIH)	20,727	415	-14,515	6,627	150	27	6,804
912 RENTAL PAYMENTS TO GSA (SLUC)	0	0	5	5	0		5
913 PURCHASED UTILITIES (NON-FUND)	125	3	-128	0	0	0	0
914 PURCHASED COMMUNICATIONS (NON-FUND)	3,110	62	-2,084	1,088	21	0	1,109
915 RENTS (NON-GSA)	4,375	88	-2,066	2,397	46	-16	2,427
917 POSTAL SERVICES (U.S.P.S)	325	7	-326	6	0		6
920 SUPPLIES & MATERIALS (NON-FUND)	147,690	2,954	-79,548	71,096	1,351	-870	71,577
921 PRINTING & REPRODUCTION	503	10	705	1,218	23	338	1,579
922 EQUIPMENT MAINTENANCE BY CONTRACT	11,103	222	-8,618	2,707	51	281	3,039
923 FACILITIES SUST, REST, & MOD BY CONTRACT	10,705	214	-8,926	1,993	38	-6	2,025
924 PHARMACEUTICAL DRUGS	32,851	1,281	23,053	57,185	2,230	400	59,815
925 EQUIPMENT PURCHASES (NON-FUND)	63,131	1,263	-39,586	24,808	471	-1,877	23,402
926 OTHER OVERSEAS PURCHASES	9,161	183	-9,306	38	1	-1	38
930 OTHER DEPOT MAINTENANCE (NON-FUND)	831	17	-414	434	8	1	443

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

	FY 2020 <u>Program</u>	Change from FY 2020 to FY 2021		FY 2021 <u>Program</u>	Change from FY 2021 to FY 2022		FY 2022 <u>Program</u>
		<u>Price Growth</u>	<u>Program Growth</u>		<u>Price Growth</u>	<u>Program Growth</u>	
932 MGT PROF SUPPORT SVCS	221,481	4,430	-125,050	100,861	1,916	-4,079	98,698
933 STUDIES, ANALYSIS & EVAL	34,367	687	-28,692	6,362	121	-193	6,290
934 ENGINEERING & TECH SVCS	14,324	286	-14,259	351	7	-358	0
935 TRAINING AND LEADERSHIP DEVELOPMENT	0	0	0	0	0	26	26
936 TRAINING AND LEADERSHIP DEVELOPMENT (OTHER CONTRACTS)	151	3	-154	0	0	0	0
937 LOCALLY PURCHASED FUEL (NON-FUND)	14	0	153	167	3	2	172
955 OTHER COSTS (MEDICAL CARE)	103,871	4,051	-70,818	37,104	1,447	512	39,063
957 OTHER COSTS (LAND AND STRUCTURES)	565	11	-576	0	0	0	0
959 OTHER COSTS (INSURANCE CLAIMS/INDMNTIES)	171	3	-174	0	0	0	0
960 OTHER COSTS (INTEREST AND DIVIDENDS)	44	1	1,316	1,361	26	1	1,388
964 OTHER COSTS (SUBSISTENCE AND SUPPORT OF PERSONS)	1,876	38	-1,497	417	8	0	425
985 RESEARCH & DEVELOPMENT, CONTRACTS	73	0	-73	0	0	0	0
986 MEDICAL CARE CONTRACTS	135,033	5,266	186,463	326,762	12,744	176,433	515,939
987 OTHER INTRA-GOVT PURCH	65,214	1,304	-255	66,263	1,259	-982	66,540
988 GRANTS	17,108	342	-6,406	11,044	210	-11,208	46
989 OTHER SERVICES	197,987	3,960	-160,606	41,341	785	6,485	48,611
990 IT CONTRACT SUPPORT SERVICES	28,649	573	-17,896	11,326	215	-2,465	9,076
993 OTHER SERVICES - SCHOLARSHIPS	3	0	-3	0	0	0	0
0999 TOTAL OTHER PURCHASES	1,125,568	27,674	-380,278	772,961	23,131	162,451	958,543
9999 GRAND TOTAL	2,027,851	41,564	-732,345	1,337,067	35,817	168,238	1,541,122

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Information Management OP-5 Exhibit**

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.

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

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I. Description of Operations Financed: (Cont.)

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 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

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I. Description of Operations Financed: (Cont.)

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) Theater Medical Information – Joint (TMIP-J); Joint Operational Medicine Information System; and Enterprise Intelligence and Data Solutions (EIDS) MHS Information Platform (MIP).

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III. Financial Summary (\$ in Thousands):

	FY 2020 <u>Actuals</u>	Budget <u>Request</u>	FY 2021 <u>Congressional Action</u>			Current <u>Estimate</u>	FY 2022 <u>Request</u>
			<u>Amount</u>	<u>Percent</u>	<u>Appropriated</u>		
A. BA Subactivities							
1. Service Medical IM/IT	\$302,403	\$132,744	\$0	0.00%	\$132,744	\$130,649	\$128,073
2. DHP IM/IT Support Programs	\$50,789	\$35,451	\$0	0.00%	\$35,451	\$35,451	\$36,236
3. Tri-Service IM/IT	\$601,630	\$884,820	\$-47,944	-5.42%	\$836,876	\$836,876	\$867,442
4. Integrated Electronic Health Record (iEHR)	\$11,673	\$10,191	\$0	0.00%	\$10,191	\$10,191	\$10,429
5. DoD Healthcare Management System Modernization (DHMSM)	\$429,731	\$480,551	\$-11,475	-2.39%	\$469,076	\$469,076	\$529,063
6. DoD Medical Information Exchange and Interoperability (DMIX)	\$53,232	\$53,590	\$0	0.00%	\$53,590	\$53,590	\$113,925
7. Theater Medical Information Program - Joint (TMIP-J)	\$80,207	\$2,721	\$87,497	3,215.62%	\$90,218	\$90,218	\$0
8. Joint Operational Medicine Information System (JOMIS)	\$11,836	\$4,213	\$21,051	499.67%	\$25,264	\$25,264	\$118,658
9. Cybersecurity	\$176,354	\$138,574	\$0	0.00%	\$138,574	\$140,669	\$140,663
10. Military Health System Desktop to Datacenter (D2D)	\$450,852	\$297,055	\$0	0.00%	\$297,055	\$297,055	\$289,188
Total	\$2,168,707	\$2,039,910	\$49,129	2.41%	\$2,089,039	\$2,089,039	\$2,233,677

1. FY 2020 actuals do not reflect Department of Defense (DoD) Medical Eligible Retiree Health Care Fund (MERHCF) of \$1,000K (O&M only).
2. FY 2020 actuals includes \$153,444K for IM/IT requirements which provide MTFs local IT Support, Desktop to Datacenter, Cybersecurity, and Functional Area Applications IM/IT operations at the Defense Health Agency.
3. FY 2020 actuals does not reflect \$50,000K of 2019/2020 Carryover which supported Medical Community of Interest (Med-COI) network modernization requirements and Functional Area Applications and computational performance management applications restoral.
4. FY 2020 actuals includes \$64,372K CARES Act COVID-19 funding.
5. FY 2021 estimate does not reflect DoD MERHCF of \$1,000K (O&M only).
6. FY 2022 estimate does not reflect DoD MERHCF of \$1,100K (O&M only).
7. The following are Information Management/Information Technology (IM/IT) Budget Activity Group internal program element realignments:
 - (a) Theater Medical Information Platform-Joint (TMIP-J) program element (-\$92,015K; -16 FTEs) to Joint Operational Medicine Information System (JOMIS) program element (+\$92,015K; +16 FTEs).
 - (b) Tri-Service IM/IT program element (-\$59,196K; -7FTEs) to DoD Medical Information Exchange (DMIX) program element (+59,196K; +7FTEs).
 - (c) Service Medical IM/IT program element (-\$406K) to Tri-Service IM/IT program element (+\$406).

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

<u>B. Reconciliation Summary</u>	<u>Change FY 2021/FY 2021</u>	<u>Change FY 2021/FY 2022</u>
BASELINE FUNDING	\$2,039,910	\$2,089,039
Congressional Adjustments (Distributed)	49,129	
Congressional Adjustments (Undistributed)	0	
Adjustments to Meet Congressional Intent	0	
Congressional Adjustments (General Provisions)	0	
SUBTOTAL APPROPRIATED AMOUNT	2,089,039	
Fact-of-Life Changes (2021 to 2021 Only)	0	
SUBTOTAL BASELINE FUNDING	2,089,039	
Supplemental	0	
Reprogrammings	0	
Price Changes		41,002
Functional Transfers		0
Program Changes		103,636
CURRENT ESTIMATE	2,089,039	2,233,677
Less: Wartime Supplemental	0	
NORMALIZED CURRENT ESTIMATE	\$2,089,039	\$2,233,677

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

FY 2021 President's Budget Request (Amended, if applicable)	\$2,039,910
1. Congressional Adjustments	\$49,129
a) Distributed Adjustments	\$49,129
1) DHMSM Delays.....	\$-11,475
2) Digital Solution Prototype for Wellness	\$5,000
3) JOMIS - Transfer from Digital Software and Technology Pilot Programs	\$108,548
4) Tri-Service IM/IT Excess Growth	\$-52,944
b) Undistributed Adjustments	\$0
c) Adjustments to Meet Congressional Intent.....	\$0
d) General Provisions	\$0
FY 2021 Appropriated Amount	\$2,089,039
2. War-Related and Disaster Supplemental Appropriations.....	\$0
a) OCO 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 2021 Baseline Funding.....	\$2,089,039
4. Reprogrammings (Requiring 1415 Actions)	\$0
a) Increases.....	\$0
b) Decreases	\$0
Revised FY 2021 Estimate.....	\$2,089,039
5. Less: Item 2, War-Related and Disaster Supplemental Appropriation and Item 4, Reprogrammings	\$0
a) Less: OCO Supplemental Funding.....	\$0
FY 2021 Normalized Current Estimate	\$2,089,039
6. Price Change	\$41,002
7. Functional Transfers.....	\$0
a) Transfers In	\$0
b) Transfers Out	\$0
8. Program Increases.....	\$127,682
a) Annualization of New FY 2021 Program	\$0

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

b) One-Time FY 2022 Increases	\$0
c) Program Growth in FY 2022.....	\$127,682
1) a. Federal Employee Retirement System – Agency Contribution Rate Assumption:.....	\$1,680
Increases civilian personnel costs to reflect the revised Federal Employee Retirement System (FERS) Agency Contribution for FY 2022 in accordance with Office of Management and Budget (OMB) Circular No. A-11. The FERS FY 2022 regular employee rate is 18.4%, which is a 1.1% increase above the FY 2021 rate of 17.3%. The FY 2021 Information Management/Information Technology civilian pay baseline funding is \$202,169K. The FY 2021 Information Management/Information Technology baseline civilian staffing is 1,537 FTEs.	
2) b. Fiscal Year 2022 Performance Awards:.....	\$1,288
Increases the FY 2022 civilian personnel awards budget at the aggregate level for General Schedule (GS) and Wage Grade (WG) employees in accordance with the Office of Management and Budget (OMB) Circular No. A-11 direction to increase civilian awards spending by no less than one (1) percentage point of FY 2020 GS and WG salary spending. Increase reflects additional civilian award funding of one (1) percentage point of the GS and WG salary spending above the FY 2020 awards budget of 1.5%. The FY 2021 Information Management/Information Technology civilian pay baseline funding is \$202,169K. The FY 2021 Information Management/Information Technology baseline civilian staffing is 1,537 FTEs.	
3) c. Civilian Pay Raise Assumption:.....	\$714
Increase required to fund civilian personnel costs for the net effect of the Civilian Pay Raise Assumptions which was increased from 1.0% to 2.7%. The FY 2021 Information Management/Information Technology civilian pay baseline funding is \$202,169K. The FY 2021 Information Management/Information Technology baseline civilian staffing is 1,537 FTEs.	
4) d. Department of Defense Healthcare Management System Modernization:	\$50,555
Continues funding the MHS GENESIS Electronic Health Record (EHR) deployment in accordance with the DoD Healthcare Management System (DHMS) Program Executive Office's (PEO) updated deployment schedule and the Continued Fielding Acquisition Decision Memorandum (ADM) from the Assistant Secretary of Defense, Acquisition (ASD(A)). Increase funding pays for MHS GENESIS system operations, supports maintenance of new capabilities added to MHS GENESIS, and supports additional users as MHS GENESIS continues to be deployed. The FY 2021 DHMSM baseline funding is \$469,076K. The FY 2021 DHMSM baseline contractor staffing is 1,520 CMEs.	

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

- 5) e. MHS IMIT Legacy System Sustainment:.....\$66,581
Continues funding the Military Treatment Facilities (MTFs) Information Management/Information Technology (IM/IT) and Defense Health Agency IT Infrastructure ongoing operating costs. Funds ensure continued operations of critical clinical, MTF readiness, and business IM/IT systems, and provides for needed hardware/software enhancements necessary for ongoing patient care and IM/IT infrastructure sustainment. In addition, funds provide for sustainment of MTF local IT support. The FY 2021 Information Management/Information Technology baseline funding is \$2,089,039K. The FY 2021 Information Management/Information Technology baseline contractor staffing is 4,437 CMEs.
- 6) f. Information Technology Healthcare Mission Funding Realigned to the Defense Health Agency:\$3,156
Realigns Information Technology Healthcare Mission and funding to Information Management/Information Technology (IM/IT), Tri-Service IM/IT program element (\$3,156K) from In-House Care (-\$202K), Consolidated Health Support (-\$513K), Education and Training (-\$75K), and Base Operations (-\$2,366K) to account for the budgeting and execution of non-pay information technology (IT) healthcare resources at the Defense Health Agency. The Defense Health Agency is consolidating all non-pay IT healthcare mission resources within IM/IT. The FY 2021 Information Management/Information Technology baseline funding is \$2,089,039K. The FY 2021 Information Management/Information Technology baseline contractor staffing is 4,347 CMEs.
- 7) g. Air Force Medical Information System Test Bed Realignment to DHA:\$2,128
Realigns Information Management/Information Technology (IM/IT) funding to Defense Health Agency, Operations and Maintenance (O&M), IM/IT, Tri-Service IM/IT program element (\$2,128K) from Research, Development, Test, and Evaluation to account for the budgeting and execution of Air Force Medical Information System Test Bed (AFMISTB) at the Defense Health Agency. The AFMISTB completed development activities and is in sustainment, appropriately requiring O&M funds. The FY 2021 Information Management/Information Technology baseline funding is \$2,089,039K. The FY 2021 Information Management/Information Technology baseline contractor staffing is 4,347 CMEs.
- 8) h. Cancer Registry Realigned to the Defense Health Agency:.....\$1,580
Realigns the Cancer Registry program and funding to Information Management/Information Technology (IM/IT), Tri-Service IM/IT program element (\$1,580K) from Consolidated Health Support to consolidate the budget and execution of the DoD Cancer Registry information system application, database, and hosting at the Defense Health Agency. The Defense Health Agency is consolidating all non-pay IT healthcare mission resources within IM/IT. The FY 2021 Information Management/Information Technology baseline funding is \$2,089,039K. The FY 2021 Information Management/Information Technology baseline contractor staffing is 4,347 CMEs.

9. Program Decreases\$-24,046

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

a) Annualization of FY 2021 Program Decreases	\$0
b) One-Time FY 2021 Increases	\$0
c) Program Decreases in FY 2022	\$-24,046
1) a. Desktop to Data Center (D2D):	\$-14,065
Reduces the Desktop to Datacenter (D2D) funding required for information technology (IT) sustainment, infrastructure maintenance, and enterprise support services for the Military Health System (MHS) centrally managed IT systems worldwide. Desktop to Datacenter reduced funding is achieved through lower IT services contract costs associated with the consolidation/standardization of helpdesk support (Global Service Center), network security, data computation and data storage, global directory services, and network management services at the enterprise-level. Funds are reduced at DHA in the Desktop to Datacenter program element. The FY 2021 Desktop to Datacenter program element baseline funding is \$297,055K. The FY 2020 Desktop to Datacenter program element baseline contractor staffing is 765 CMEs.	
2) b. Service Medical Information Management/Information Technology Reduction:	\$-5,597
Reduces funding for the Service Medical Information Management/Information Technology (IM/IT) FTES (-29FTES;-\$2,380K) and contracts (\$3,217K) through consolidation of IM/IT services at the Defense Health Agency. The Military Health System (MHS) is utilizing the Defense Health Agency (DHA) as the IT Enterprise Service Provider and reduces IM/IT requirements by optimizing the IT infrastructure with common architecture and aligning current and future technology across all Military Treatment Facilities and activities. The FY 2021 Service Medical IM/IT baseline funding is \$130,649K. The FY 2021 Service Medical IM/IT baseline civilian staffing is 878 FTEs and the Service Medical IM/IT baseline contractor staffing is 113 CMEs.	
3) c. Cybersecurity Baseline Adjustment:	\$-2,967
Continues the reduction to the Cybersecurity program element funding required to resource the design, build, fielding, development, refresh and sustainment of information technology supporting the DoD's ability to maintain an appropriate level of confidentiality, integrity, authentication, non-repudiation and network availability. Adjustment directly reduces IT contractor support services as the Defense Health Agency (DHA) cybersecurity program matures beyond initial actions to establish the program and baseline. The FY 2021 Cybersecurity program element baseline funding is \$140,669K. The FY 2021 Cybersecurity program element baseline contractor staffing is 421 CMEs.	

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

4) d. Pharmacy Refill Realigned to In-House Care:\$-1,417
Realigns funding from Information Management/Information Technology (IM/IT), Tri-Service IM/IT program element (\$-1,417K) to the In House Care Budget Activity Group to account for the budgeting and execution of prescription refill/audio care contractual requirements within the Pharmacy Operations Division at the Defense Health Agency. The FY 2021 Information Management/Information Technology baseline funding is \$2,089,039K. The FY 2021 Information Management/Information Technology baseline contractor staffing is 4,437 CMEs.

FY 2022 Budget Request\$2,233,677

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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); and Enterprise Intelligence and Data Solutions (EIDS) MHS Information Platform (MIP).

Workload Description by Program	FY 2020 Actuals	FY 2021 Estimate	FY 2022 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.	56 systems	52 systems	50 systems
2. Desktop to Datacenter migration of end user devices.	48,031	62,735	0
3. Shutdown/Decommission (end operational use) legacy systems that will be replaced by MHS GENESIS (site instances of systems)	10 site instances of systems	20 site instances of systems	30 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)	981	1040	1065
2. Implement required cyber security patches (number of patches to be required cannot be determined in advance)	92%	90%	90%

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IV. Performance Criteria and Evaluation Summary:

Workload Description by Program	FY 2020 Actuals	FY 2021 Estimate	FY 2022 Estimate
Defense Health Agency (DHA) Global Service Center (GSC)			
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. [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]	285 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	55,778 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)	23	81	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)	48	64	19

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IV. Performance Criteria and Evaluation Summary:

Workload Description by Program	FY 2020 Actuals	FY 2021 Estimate	FY 2022 Estimate
DoD Healthcare Management Systems Modernization (DHMSM) (Planned Deployment Schedule)			
1. 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.	98.28%	97.50%	97.50%
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)	69.48%	65.00%	65.00%
DoD Medical Information Exchange and Interoperability (DMIX)			
1. Percentage of population with Joint Legacy Viewer (JLV) access using JLV.	36.50%	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.	99.89	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)	99.55% / 98.82%	93.00% / 93.00%	93.00% / 93.00%

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IV. Performance Criteria and Evaluation Summary:

Workload Description by Program	FY 2020 Actuals	FY 2021 Estimate	FY 2022 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)	NA	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)	NA	98.5%	98.5%
Theater Medical Information – Joint (TMIP-J)			
1. Availability: Percentage of time the system is available not counting unscheduled downtime (Percentage)	99%	99%	NA
2. Reliability: Number of Tier III trouble tickets received monthly – tickets are related to software code updates only	5	<10	NA
3. Maintainability: Time to implement trouble tickets (Metric ID OP1913-5006)	3	<3	NA
Joint Operational Medicine Information System (JOMIS)			
1. Availability: Percentage of time the system is available not counting unscheduled downtime (Percentage)	NA	NA	99%
2. Reliability: Number of Tier III trouble tickets received monthly – tickets are related to software code updates only	NA	NA	<10
Maintainability: Time to implement trouble tickets (Metric ID OP1913-5006)	NA	NA	<3

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V. Personnel Summary:

	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>Change FY 2020/ FY 2021</u>	<u>Change FY 2021/ FY 2022</u>
Active Military End Strength (E/S) (Total)	433	442	437	9	-5
Officer	98	82	91	-16	9
Enlisted	335	360	346	25	-14
Active Military Average Strength (A/S) (Total)	395	438	440	43	2
Officer	104	90	87	-14	-3
Enlisted	291	348	353	57	5
Civilian FTEs (Total)	1,784	1,537	1,547	-247	10
U.S. Direct Hire	1,750	1,490	1,500	-260	10
Foreign National Direct Hire	15	16	16	1	0
Total Direct Hire	1,765	1,506	1,516	-259	10
Foreign National Indirect Hire	18	30	30	12	0
Reimbursable Civilians	1	1	1	0	0
Average Annual Civilian Salary (\$ in thousands)	126.0	131.6	138.4	5.6	6.7
Contractor FTEs (Total)	4,205	4,437	5,279	232	842

Personnel Summary Explanations:

Explanation of changes in Active Military End Strength: The increase in military end strength from FY 2020 to FY 2021 (+9) transfers to the military departments for Medical Headquarters Activities (Army: -15) and transfers to the military departments for medical readiness programs (Navy: +3) and transfers to the military department for readiness programs (Air Force: +21). The decrease from FY 2021 to FY 2022 (-5) includes the Tech Adjustment made by the military departments for the revised drawdown reductions (Army: -1, Air Force: -4).

Explanation of changes in Civilian FTEs: The net decrease from FY 2020 to FY 2021 (-247) reflects adjustments based on Air Force Medical Service's manpower analysis (+4); decreases due to Desktop to Data Center reductions within the Military Health System IM/IT Infrastructure at the Army Medical Command (-36) and the Navy Bureau of Medicine and Surgery (-4); 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; Army Medical Command Medical Headquarters transfer to the Department of the Army

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V. Personnel Summary: (Cont.)

(-2); realignment of the Veterinary Services Information Management Systems from Army Consolidated Health Support to the Defense Health Agency (+3); realignment of the Medical Operational Data System program management office from the Defense Health Agency (-5) to Army Medical Command (+5); the transfer of IM/IT FTEs following the Defense Wide Review, to the Department of the Army (-24) and the Department of the Navy (-12), and execution adjustments (-176: DHA-FOD +17, DCFM +6, Navy +4, USUHS -3, Air Force -42, and Army -158) . The net increase from FY 2021 to FY 2022 (+10) reflects 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).

Explanation of changes in Contractor FTEs: The net increase from FY 2020 to FY 2021 (232) reflects the restoration of IMIT Contract funding for the maintenance of the MHS IT Legacy systems (+388), the return of Software and Digital Technology (BA08) pilot program contract funding to Operations and Maintenance, TMIP-J (+285) and JOMIS (+75), execution adjustments at DHMS PEO based on FY 2020 estimated actual execution to deploy the Military Health System GENESIS (-229), and efficiencies achieved through consolidation of IT infrastructure at the Defense Health Agency (-287). The increase from FY 2021 to FY 2022 (+842) reflects continued increases for DHMS PEO to deploy the Military Health System GENESIS (+887), ongoing efficiencies achieved through consolidation of infrastructure and legacy systems, (-45) 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.

**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2022 Budget Estimates
Information Management OP-5 Exhibit**

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

	FY 2020 Program	Change from FY 2020 to FY 2021		FY 2021 Program	Change from FY 2021 to FY 2022		FY 2022 Program
		Price Growth	Program Growth		Price Growth	Program Growth	
101 EXEC, GEN'L & SPEC SCHEDS	221,319	3,408	-26,754	197,973	4,494	5,333	207,800
103 WAGE BOARD	1,221	19	-81	1,159	26	1,780	2,965
104 FN DIRECT HIRE (FNDH)	1,028	16	39	1,083	25	-1	1,107
105 SEPARATION LIABILITY (FNDH)	16	0		16	0		16
0199 TOTAL CIVILIAN PERSONNEL COMPENSATION	223,584	3,443	-26,796	200,231	4,545	7,112	211,888
308 TRAVEL OF PERSONS	2,002	40	1,460	3,502	67	84	3,653
0399 TOTAL TRAVEL	2,002	40	1,460	3,502	67	84	3,653
614 SPACE & NAVAL WARFARE CENTER	0	0	5,604	5,604	26	86	5,716
635 NAVY BASE SUPPORT (NAVSEC OTHER SUPPORT SERVICES)	0	0	369	369	0	7	376
647 DISA ENTERPRISE COMPUTING CENTERS	4,859	63	84,511	89,433	0	-1,848	87,585
671 DISA DISN SUBSCRIPTION SERVICES (DSS)	8,583	412	24,503	33,498	2,556	-1,955	34,099
680 BUILDING MAINT FUND PURCH	0	0	91	91	1	1	93
0699 TOTAL OTHER FUND PURCHASES	13,442	475	115,078	128,995	2,583	-3,709	127,869
707 AMC TRAINING	143	-9	-134	0	0	0	0
771 COMMERCIAL TRANSPORT	7	0	31	38	1	0	39
0799 TOTAL TRANSPORTATION	150	-9	-103	38	1	0	39
901 FOREIGN NATIONAL INDIRECT HIRE (FNIH)	1,108	22	808	1,938	44	32	2,014
912 RENTAL PAYMENTS TO GSA (SLUC)	193	4	-197	0	0	0	0
913 PURCHASED UTILITIES (NON-FUND)	1,036	21	-1,057	0	0	0	0
914 PURCHASED COMMUNICATIONS (NON-FUND)	5,211	104	8,292	13,607	259	14	13,880
915 RENTS (NON-GSA)	100	2	275	377	7		384
917 POSTAL SERVICES (U.S.P.S)	953	19	-972	0	0	0	0
920 SUPPLIES & MATERIALS (NON-FUND)	5,492	110	8,051	13,653	259	294	14,206
921 PRINTING & REPRODUCTION	264	5	-269	0	0	0	0
922 EQUIPMENT MAINTENANCE BY CONTRACT	3,415	68	-2,750	733	14	-15	732

**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2022 Budget Estimates
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VI. OP 32 Line Items as Applicable (Dollars in thousands):

	FY 2020 Program	Change from FY 2020 to FY 2021		FY 2021 Program	Change from FY 2021 to FY 2022		FY 2022 Program
		Price Growth	Program Growth		Price Growth	Program Growth	
923 FACILITIES SUST, REST, & MOD BY CONTRACT	931	19	-910	40	1	0	41
925 EQUIPMENT PURCHASES (NON-FUND)	90,327	1,807	21,388	113,522	2,157	2	115,681
932 MGT PROF SUPPORT SVCS	258,670	5,173	-191,468	72,375	1,375	63	73,813
933 STUDIES, ANALYSIS & EVAL	4,705	94	-1,577	3,222	61	4	3,287
934 ENGINEERING & TECH SVCS	57,103	1,142	-54,715	3,530	67	4	3,601
936 TRAINING AND LEADERSHIP DEVELOPMENT (OTHER CONTRACTS)	102	2	-104	0	0	0	0
955 OTHER COSTS (MEDICAL CARE)	22,315	870	-23,185	0	0	0	0
959 OTHER COSTS (INSURANCE CLAIMS/INDMNTIES)	3	0	-3	0	0	0	0
960 OTHER COSTS (INTEREST AND DIVIDENDS)	0	0	158	158	3		161
986 MEDICAL CARE CONTRACTS	3,389	132	17,966	21,487	838	-2,870	19,455
987 OTHER INTRA-GOVT PURCH	57,247	1,145	52,209	110,601	2,101	-245	112,457
989 OTHER SERVICES	26,213	524	-25,843	894	17	365	1,276
990 IT CONTRACT SUPPORT SERVICES	1,390,752	27,815	-18,431	1,400,136	26,603	102,501	1,529,240
0999 TOTAL OTHER PURCHASES	1,929,529	39,078	-212,334	1,756,273	33,806	100,149	1,890,228
9999 GRAND TOTAL	2,168,707	43,027	-122,695	2,089,039	41,002	103,636	2,233,677

**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2022 Budget Estimates
Management Activities OP-5 Exhibit**

I. Description of Operations Financed:

This Budget Activity Group is comprised of the Army, Navy, Air Force and 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. The Defense Health Agency became the Operation of Record in FY 2015.

Management Headquarters - Resources required for the Army Medical Command, the Navy Bureau of Medicine and Surgery, the Air Force Medical Service, and 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.

**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2022 Budget Estimates
Management Activities OP-5 Exhibit**

III. Financial Summary (\$ in Thousands):

	FY 2020 <u>Actuals</u>	Budget <u>Request</u>	FY 2021 <u>Congressional Action</u>			Current <u>Estimate</u>	FY 2022 <u>Request</u>
			<u>Amount</u>	<u>Percent</u>	<u>Appropriated</u>		
<u>A. BA Subactivities</u>							
Defense Health Agency	\$188,755	\$249,465	\$0	0.00%	\$249,465	\$249,465	\$253,449
Management Headquarters	<u>\$111,301</u>	<u>\$81,162</u>	<u>\$0</u>	<u>0.00%</u>	<u>\$81,162</u>	<u>\$81,162</u>	<u>\$81,689</u>
Total	\$300,056	\$330,627	\$0	0.00%	\$330,627	\$330,627	\$335,138

1. FY 2020 actuals includes \$17,089K CARES Act COVID-19 funding.

2. FY 2020 actuals includes (-\$45,671K) reprogrammed to Information Management/Information Technology for unfunded requirements.

**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2022 Budget Estimates
Management Activities OP-5 Exhibit**

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

<u>B. Reconciliation Summary</u>	<u>Change FY 2021/FY 2021</u>	<u>Change FY 2021/FY 2022</u>
BASELINE FUNDING	\$330,627	\$330,627
Congressional Adjustments (Distributed)	0	
Congressional Adjustments (Undistributed)	0	
Adjustments to Meet Congressional Intent	0	
Congressional Adjustments (General Provisions)	0	
SUBTOTAL APPROPRIATED AMOUNT	330,627	
Fact-of-Life Changes (2021 to 2021 Only)	0	
SUBTOTAL BASELINE FUNDING	330,627	
Supplemental	0	
Reprogrammings	0	
Price Changes		7,060
Functional Transfers		0
Program Changes		-2,549
CURRENT ESTIMATE	330,627	335,138
Less: Wartime Supplemental	0	
NORMALIZED CURRENT ESTIMATE	\$330,627	\$335,138

**Defense Health Program
 Operation and Maintenance, Defense-Wide
 Fiscal Year (FY) 2022 Budget Estimates
 Management Activities OP-5 Exhibit**

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

FY 2021 President's Budget Request (Amended, if applicable)	\$330,627
1. Congressional Adjustments	\$0
a) Distributed Adjustments	\$0
b) Undistributed Adjustments	\$0
c) Adjustments to Meet Congressional Intent.....	\$0
d) General Provisions	\$0
FY 2021 Appropriated Amount	\$330,627
2. War-Related and Disaster Supplemental Appropriations.....	\$0
a) OCO Supplemental Funding	\$0
3. Fact-of-Life Changes.....	\$0
a) Functional Transfers.....	\$0
b) Technical Adjustments	\$0
c) Emergent Requirements.....	\$0
FY 2021 Baseline Funding	\$330,627
4. Reprogrammings (Requiring 1415 Actions)	\$0

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

a) Increases	\$0
b) Decreases	\$0
Revised FY 2021 Estimate	\$330,627
5. Less: Item 2, War-Related and Disaster Supplemental Appropriation and Item 4, Reprogrammings	\$0
a) Less: OCO Supplemental Funding.....	\$0
FY 2021 Normalized Current Estimate	\$330,627
6. Price Change	\$7,060
7. Functional Transfers.....	\$0
a) Transfers In	\$0
b) Transfers Out	\$0
8. Program Increases	\$4,363
a) Annualization of New FY 2021 Program	\$0
b) One-Time FY 2022 Increases	\$0
c) Program Growth in FY 2022.....	\$4,363
1) a. Federal Employee Retirement System – Agency Contribution Rate Assumption:.....	\$1,993
<p style="margin-left: 40px;">Increases civilian personnel costs to reflect the revised Federal Employee Retirement System (FERS) Agency Contribution for FY 2022 in accordance with Office of Management and Budget (OMB) Circular No. A-11. The FERS FY 2022 regular employee rate is 18.4%, which is a 1.1% increase above the FY 2021 rate of 17.3%. The FY 2021 Management Activities</p>	

**Defense Health Program
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Fiscal Year (FY) 2022 Budget Estimates
Management Activities OP-5 Exhibit**

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

baseline civilian funding is \$210,737K. The FY 2021 Management Activities baseline civilian staffing is 1,529 FTEs.

2) b. Fiscal Year 2022 Performance Awards:\$1,526

Increases the FY 2022 civilian personnel awards budget at the aggregate level for General Schedule (GS) and Wage Grade (WG) employees in accordance with the Office of Management and Budget (OMB) Circular No. A-11 direction to increase civilian awards spending by no less than one (1) percentage point of FY 2020 GS and WG salary spending. Increase reflects additional civilian award funding of one (1) percentage point of the GS and WG salary spending above the FY 2020 awards budget of 1.5%. The FY 2021 Management Activities baseline civilian funding is \$210,737K. The FY 2021 Management Activities baseline civilian staffing is 1,529 FTEs.

3) c. Civilian Pay Raise Assumption:\$844

Increase required to fund civilian personnel costs for the net effect of the Civilian Pay Raise Assumptions which was increased from 1.0% to 2.7%. The FY 2021 Management Activities baseline civilian funding is \$210,737K. The FY 2021 Management Activities baseline civilian staffing is 1,529 FTEs.

9. Program Decreases\$-6,912

a) Annualization of FY 2021 Program Decreases\$0

b) One-Time FY 2021 Increases\$0

c) Program Decreases in FY 2022\$-6,912

1) a. Defense Health Program Reform Management – Services Efficiencies:\$-2,644

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 2021 Management Headquarters baseline funding request is \$81,162K. The FY 2021 Management Headquarters baseline contractor staffing is 105 CMEs.

**Defense Health Program
 Operation and Maintenance, Defense-Wide
 Fiscal Year (FY) 2022 Budget Estimates
 Management Activities OP-5 Exhibit**

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

2) b. Military Health System Management Headquarters Reform:.....\$-3,475

Continues the implementation of the Military Health System organizational reforms required by the National Defense Authorization Acts of FY 2017 and FY 2019 focused on efforts to reduce redundant and unnecessary headquarters overhead while building a structure that drives improved outcomes for readiness, health, quality and cost. Reform efforts reduces the Defense Health Agency contract requirements in the Defense Health Agency (-\$3,475K) program element. The FY 2021 Management Activities baseline funding is \$330,627K. The FY 2021 Management Activities Baseline contractor staffing is 438 CMEs.

3) c. Financial Establishment of Defense Health Agency Safety Program:.....\$-793

Realigns Management Activities funding and FTEs (-\$793K; -3 FTEs) from the Defense Health Agency program element to Consolidated Health Support to establish the Defense Health Agency's Safety Program. Funds transferred support civilian salaries and associated costs for travel, supplies and contracts. The FY 2021 Defense Health Agency program element baseline funding request is \$249,465K. The FY 2021 Defense Health Agency program element baseline civilian staffing is 1,182 FTEs. The FY 2021 Defense Health Agency program element baseline contractor staffing is 333 CMEs.

FY 2022 Budget Request\$335,138

**Defense Health Program
Operation and Maintenance, Defense-Wide
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IV. Performance Criteria and Evaluation Summary:

Refer to the Personnel Summary in Section V.

**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2022 Budget Estimates
Management Activities OP-5 Exhibit**

V. Personnel Summary:

	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>Change FY 2020/ FY 2021</u>	<u>Change FY 2021/ FY 2022</u>
Active Military End Strength (E/S) (Total)	632	727	719	95	-8
Officer	403	483	494	80	11
Enlisted	229	244	225	15	-19
Active Military Average Strength (A/S) (Total)	843	680	724	-163	44
Officer	563	443	489	-120	46
Enlisted	280	237	235	-43	-2
Civilian FTEs (Total)	1,523	1,529	1,674	6	145
U.S. Direct Hire	1,520	1,524	1,669	4	145
Total Direct Hire	1,520	1,524	1,669	4	145
Foreign National Indirect Hire	3	5	5	2	0
Average Annual Civilian Salary (\$ in thousands)	127.7	137.8	139.4	10.1	1.6
Contractor FTEs (Total)	589	438	330	-151	-108

Personnel Summary Explanations:

Explanation of changes in Active Military End Strength: The increase from FY 2020 to FY 2021 (+95) includes transfers from the military departments for Major Headquarters Activities (Army: +56, Navy: +3, Air Force: +36). The decrease from FY 2021 to FY 2022 (-8) includes transfers from the military departments for Major Headquarters Activities (Navy: -6, Air Force: -2).

Explanation of changes in Civilian FTEs: The net increase from FY 2020 to FY 2021 (+6) results from Service headquarters execution adjustments (-18: DHA-FOD: +290, Army: -151, Navy: -58, and Air Force: -99); Army technical adjustments for medical readiness mission transfer to the Department of the Army (+25); Military Health System Major Headquarters reduction (Army: -24, Air Force: -1); and realignment of the Office of the General Counsel's FTEs to the Defense Health Agency, (+24) from National Capital Region Medical Directorate, Base Operations. The net increase from FY 2021 to FY 2022 (+145) reflects an increase in civilian FTEs in support of section 702 of the FY 2017 National Defense Authorization Act (+147); and Defense Health Agency internal realignments for the Management Information Platform (+1) and for the Safety and Occupational Health Program (-3).

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

Explanation of changes in Contractor FTEs: The decrease from FY 2020 to FY 2021 (-151) reflects execution adjustments to equipment maintenance contracts (-121) based on FY 2020 actuals, and the net impact of decreases to other services from non-federal sources (-19), IT contracts support services (-8), and advisory and assistance services contracts (-3) for the continued consolidation of services at the Defense Health Agency in accordance with the FY 2017 National Defense Authorization Act Section 702. 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.

**Defense Health Program
Operation and Maintenance, Defense-Wide
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Management Activities OP-5 Exhibit**

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

	FY 2020 Program	Change from FY 2020 to FY 2021		FY 2021 Program	Change from FY 2021 to FY 2022		FY 2022 Program
		Price Growth	Program Growth		Price Growth	Program Growth	
101 EXEC, GEN'L & SPEC SCHEDS	193,504	2,980	13,260	209,744	4,761	17,149	231,654
103 WAGE BOARD	701	11	-216	496	11	684	1,191
107 VOLUNTARY SEP INCENTIVES	40	1	-1	40	1	-1	40
110 UNEMPLOYMENT COMPENSATION	0	0	0	0	0	5,830	5,830
0199 TOTAL CIVILIAN PERSONNEL COMPENSATION	194,245	2,992	13,043	210,280	4,773	23,662	238,715
308 TRAVEL OF PERSONS	3,065	61	1,827	4,953	94	-1,011	4,036
0399 TOTAL TRAVEL	3,065	61	1,827	4,953	94	-1,011	4,036
412 NAVY MANAGED SUPPLY, MATL	0	0	2	2	0		2
417 LOCAL PURCH SUPPLIES & MAT	71	1	421	493	9	-2	500
0499 TOTAL DEFENSE WORKING CAPITAL FUND SUPPLIES AND MATERIALS	71	1	423	495	9	-2	502
707 AMC TRAINING	118	-8	-110	0	0	0	0
771 COMMERCIAL TRANSPORT	50	1	221	272	5	-34	243
0799 TOTAL TRANSPORTATION	168	-7	111	272	5	-34	243
901 FOREIGN NATIONAL INDIRECT HIRE (FNIH)	268	5	184	457	10	-1	466
914 PURCHASED COMMUNICATIONS (NON-FUND)	0	0	10	10	0		10
915 RENTS (NON-GSA)	0	0	29	29	1	0	30
917 POSTAL SERVICES (U.S.P.S)	0	0	439	439	8	1	448
920 SUPPLIES & MATERIALS (NON-FUND)	1,984	40	-852	1,172	22	-97	1,097
921 PRINTING & REPRODUCTION	760	15	-149	626	12	-48	590
922 EQUIPMENT MAINTENANCE BY CONTRACT	2	0	236	238	5	-10	233
923 FACILITIES SUST, REST, & MOD BY CONTRACT	1,070	21	-1,091	0	0	0	0
925 EQUIPMENT PURCHASES (NON-FUND)	502	10	2,788	3,300	63	3	3,366
932 MGT PROF SUPPORT SVCS	46,362	927	20,422	67,711	1,287	-22,980	46,018
933 STUDIES, ANALYSIS & EVAL	18,349	367	-11,437	7,279	138	-302	7,115

**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2022 Budget Estimates
Management Activities OP-5 Exhibit**

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

	FY 2020 <u>Program</u>	Change from FY 2020 to FY 2021		FY 2021 <u>Program</u>	Change from FY 2021 to FY 2022		FY 2022 <u>Program</u>
		<u>Price Growth</u>	<u>Program Growth</u>		<u>Price Growth</u>	<u>Program Growth</u>	
934 ENGINEERING & TECH SVCS	50	1	-51	0	0	0	0
936 TRAINING AND LEADERSHIP DEVELOPMENT (OTHER CONTRACTS)	208	4	-212	0	0	0	0
955 OTHER COSTS (MEDICAL CARE)	158	6	-155	9	0		9
964 OTHER COSTS (SUBSISTENCE AND SUPPORT OF PERSONS)	5	0	10	15	0	-15	0
986 MEDICAL CARE CONTRACTS	206	8	-214	0	0	0	0
987 OTHER INTRA-GOVT PURCH	7,073	141	5,694	12,908	245	-81	13,072
989 OTHER SERVICES	20,289	406	-2,356	18,339	348	-1,471	17,216
990 IT CONTRACT SUPPORT SERVICES	5,221	104	-3,230	2,095	40	-163	1,972
0999 TOTAL OTHER PURCHASES	102,507	2,055	10,065	114,627	2,179	-25,164	91,642
9999 GRAND TOTAL	300,056	5,102	25,469	330,627	7,060	-2,549	335,138

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**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2022 Budget Estimates
Education and Training OP-5 Exhibit**

I. Description of Operations Financed:

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

Health Professions Scholarship Program - Resources for the Armed Forces Health Professions Scholarship Program (HPSP), Financial Assistance Program (FAP), and other pre-commissioning professional scholarship programs. The HPSP, FAP and pre-commissioning funds and functions will transfer 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. The HPSP funds were transferred in FY 2021 to the Departments of the Air Force, Army and Navy in accordance with the transfer of medical readiness functions that occur outside of medical treatment facilities.

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.

The FY 2022 request includes \$20,000K restoral for the following Uniformed Services University of the Health Sciences' programs that were reduced in the FY 2021 Defense Health Program President's Budget: (a) Center for Deployment Psychology (+\$7,245K), (b) Tri-Service Nursing Research Program (+\$6,500K), (c) Center for the Study of Traumatic Stress (+\$4,005K), (d) Defense Medical Ethics Center (+\$1,000K), (e) National Center for Disaster Medicine and Public Health (+\$1,000K), (f) Interagency Institute for Federal Healthcare Executives (+\$250K).

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, Brooks Air Force Base, Texas; 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 the Armed Forces HPSP, FAP residencies, and the Health Profession Loan Repayment Program (HPLRP). 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) 2022 Budget Estimates
Education and Training OP-5 Exhibit**

III. Financial Summary (\$ in Thousands):

	FY 2020 <u>Actuals</u>	Budget <u>Request</u>	FY 2021 <u>Congressional Action</u>			Current <u>Estimate</u>	FY 2022 <u>Request</u>
			<u>Amount</u>	<u>Percent</u>	<u>Appropriated</u>		
A. BA Subactivities							
1. Health Professions Scholarship Program	\$253,759	\$533	\$6,000	1,125.70%	\$6,533	\$6,533	\$0
2. Uniformed Services University of the Health Sciences	\$173,890	\$164,299	\$16,564	10.08%	\$180,863	\$180,863	\$177,924
3. Other Education and Training	\$319,151	\$150,859	\$-2,570	-1.70%	\$148,289	\$148,289	\$155,310
Total	\$746,800	\$315,691	\$19,994	6.33%	\$335,685	\$335,685	\$333,234

1. FY 2020 actuals includes \$15,000K CARES Act COVID-19 funding.

2. FY 2020 actuals includes (-\$6,538K) reprogrammed to Information Management/Information Technology for unfunded requirements and \$366K reprogrammed from Consolidated Health Support for travel requirements.

3. The Defense Health Program will reprogram the FY 2021 Health Professions Scholarship Program (HPSP) funds to the Departments of the Army, Air Force and Navy for execution of the HPSP funds in accordance with the transfer of the HPSP to the Service Departments in the FY 2021 President's Budget.

4. The FY 2022 request includes \$20,000K restoral for the following Uniformed Services University of the Health Sciences' programs that were reduced in the FY 2021 Defense Health Program President's Budget:

(a) Center for Deployment Psychology (+\$7,245K)

(b) Tri-Service Nursing Research Program (+\$6,500K)

(c) Center for the Study of Traumatic Stress (+\$4,005K)

(d) Defense Medical Ethics Center (+\$1,000K)

(e) National Center for Disaster Medicine and Public Health (+\$1,000K)

(f) Interagency Institute for Federal Healthcare Executives (+\$250K)

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

<u>B. Reconciliation Summary</u>	<u>Change FY 2021/FY 2021</u>	<u>Change FY 2021/FY 2022</u>
BASELINE FUNDING	\$315,691	\$335,685
Congressional Adjustments (Distributed)	19,994	
Congressional Adjustments (Undistributed)	0	
Adjustments to Meet Congressional Intent	0	
Congressional Adjustments (General Provisions)	0	
SUBTOTAL APPROPRIATED AMOUNT	335,685	
Fact-of-Life Changes (2021 to 2021 Only)	0	
SUBTOTAL BASELINE FUNDING	335,685	
Supplemental	0	
Reprogrammings	0	
Price Changes		7,195
Functional Transfers		-5,592
Program Changes		-4,054
CURRENT ESTIMATE	335,685	333,234
Less: Wartime Supplemental	0	
NORMALIZED CURRENT ESTIMATE	\$335,685	\$333,234

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

FY 2021 President's Budget Request (Amended, if applicable)	\$315,691
1. Congressional Adjustments	\$19,994
a) Distributed Adjustments	\$19,994
1) Equipment Purchases Excess Growth	\$-5,906
2) Health Professions Scholarship Program Increase	\$6,000
3) Specialized Medical Pilot Program	\$2,500
4) Suicide Prevention Programs	\$7,400
5) Uniformed Services University of the Health Science Restoration	\$10,000
b) Undistributed Adjustments	\$0
c) Adjustments to Meet Congressional Intent	\$0
d) General Provisions	\$0
FY 2021 Appropriated Amount	\$335,685
2. War-Related and Disaster Supplemental Appropriations	\$0
a) OCO Supplemental Funding	\$0
3. Fact-of-Life Changes	\$0

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

a) Functional Transfers.....	\$0
b) Technical Adjustments	\$0
c) Emergent Requirements.....	\$0
FY 2021 Baseline Funding.....	\$335,685
4. Reprogrammings (Requiring 1415 Actions).....	\$0
a) Increases.....	\$0
b) Decreases	\$0
Revised FY 2021 Estimate.....	\$335,685
5. Less: Item 2, War-Related and Disaster Supplemental Appropriation and Item 4, Reprogrammings	\$0
a) Less: OCO Supplemental Funding.....	\$0
FY 2021 Normalized Current Estimate	\$335,685
6. Price Change	\$7,195
7. Functional Transfers	\$-5,592
a) Transfers In	\$0
b) Transfers Out	\$-5,592
1) a. Defense Health Agency Medical Error Transfer Correction:.....	\$-5,592

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

Transfers Other Education and Training program element funds from the Defense Health Program (DHP) to the Department of the Army to correct an error made during the FY 2021 President's Budget when calculating the amount transferred to Operations and Maintenance, Army (OMA) for the Medical Simulations program.

8. Program Increases	\$12,089
a) Annualization of New FY 2021 Program	\$0
b) One-Time FY 2022 Increases	\$0
c) Program Growth in FY 2022.....	\$12,089
1) a. Federal Employee Retirement System – Agency Contribution Rate Assumption:.....	\$1,186
Increases civilian personnel costs to reflect the revised Federal Employee Retirement System (FERS) Agency Contribution for FY 2022 in accordance with Office of Management and Budget (OMB) Circular No. A-11. The FERS FY 2022 regular employee rate is 18.4%, which is a 1.1% increase above the FY 2021 rate of 17.3%. The FY 2021 Education and Training baseline civilian funding is \$143,578K. The FY 2021 Education and Training baseline civilian staffing is 1,125 FTEs.	
2) b. Fiscal Year 2022 Performance Awards:.....	\$908
Increases the FY 2022 civilian personnel awards budget at the aggregate level for General Schedule (GS) and Wage Grade (WG) employees in accordance with the Office of Management and Budget (OMB) Circular No. A-11 direction to increase civilian awards spending by no less than one (1) percentage point of FY 2020 GS and WG salary spending. Increase reflects additional civilian award funding of one (1) percentage point of the GS and WG salary spending above the FY 2020 awards budget of 1.5%. The FY 2021 Education and Training baseline civilian funding is \$143,578K. The FY 2021 Education and Training baseline civilian staffing is 1,125 FTEs.	
3) c. Civilian Pay Raise Assumption:.....	\$504
Increase required to fund civilian personnel costs for the net effect of the Civilian Pay Raise Assumptions which was increased from 1.0% to 2.7%. The FY 2021 Education and Training baseline civilian funding is \$143,578K. The FY 2021 Education and Training baseline civilian staffing is 1,125 FTEs.	

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

4) d. Defense Health Agency Education and Training:.....\$9,491

Provides funds for the purchase of supplies and materials, equipment, contracts, and printing and reproduction for Education and Training operations at the Defense Health Agency's activities. Increased funding is necessary for simulation equipment, virtual learning equipment, and consumable supplies to support and sustain the training of medical professionals. Simulation and virtual training 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. Lessons learned from the effect of the COVID-19 pandemic show decreased in-person training opportunities, and an increased requirement for virtual training. A lack of necessary simulation equipment and virtual learning opportunities will negatively impact the ability to effectively train healthcare professionals which can potentially lead to sub-optimal patient outcomes, patient harm and increased risk of infection. The FY 2021 Other Education and Training program element baseline funding is \$148,289K.

5) e. Uniformed Services University of the Health Sciences Program Restoral:\$0

Restores funding in the Uniformed Services University of the Health Sciences' program element for the following programs that were reduced in the FY 2021 Defense Health Program President's Budget:

- (a) Center for Deployment Psychology
- (b) Tri-Service Nursing Research Program
- (c) Center for the Study of Traumatic Stress
- (d) Defense Medical Ethics Center
- (e) National Center for Disaster Medicine and Public Health
- (f) Interagency Institute for Federal Healthcare Executives

9. Program Decreases\$-16,143

a) Annualization of FY 2021 Program Decreases\$0

b) One-Time FY 2021 Increases\$-13,400

1) a. Center for the Study of Traumatic Stress:.....\$-7,400

Adjustment to reverse one-time suicide prevention funding increase which was issued to the Uniformed Services University of the Health Sciences' (USUHS) for suicide prevention studies at the Center for the Study of Traumatic Stress. Adjustment decreases grants funding in the USUHS program element. The FY 2021 Uniform Services University of the Health Sciences program element baseline funding is \$180,863K. The FY 2021 Uniform Services University of the Health Sciences baseline contractor staffing is 99 CMEs.

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

<p>2) b. Health Professions Scholarship Program-Surgeons:</p> <p>Adjustment to reverse one-time Health Professions Scholarship Programing (HPSP) funding which was issued to increase the number of scholarships for surgeons to support the Defense Health Program. The HPSP and associated funding was transferred from the Defense Health Program to the Service Departments in the Defense Wide Review. The FY 2021 Health Professional Scholarship program baseline funding is \$6,533K.</p>	<p>.....\$-6,000</p>
<p>c) Program Decreases in FY 2022</p>	<p>.....\$-2,743</p>
<p>1) a. Education and Training Contracts Reduction:.....</p> <p>Reduces Education and Training contract requirements through Military Health System enterprise-wide efforts 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 purchased services contracts 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 Other Education and Training program element. The FY 2021 Other Education and Training program element baseline funding is \$148,289K. The FY 2021 Education and Training baseline contractor staffing is 194 CMEs.</p>	<p>.....\$-1,073</p>
<p>2) b. Virtual Medical Library Realigned to the Defense Health Agency:.....</p> <p>Realigns the Virtual Medical Library program from Education and Training Budget Activity Group (BAG) Other Education and Training program element (-\$546K) and the Uniformed Services University of the Health Sciences (-\$402K) to Defense Health Agency, In-House Care to provide uniformity of available data in the Virtual Medical Library program. Funding provides a collection of medical e-journals, e-books, and serve as a searchable medical/biomedical database that provides military health professionals easy access to common clinical data resulting in the standardization of care throughout the Military Health System (MHS). The FY 2021 Other Education and Training program element baseline funding is \$148,289K. The FY 2021 Other Education and Training baseline contracting is 194 CMEs.</p>	<p>.....\$-948</p>

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Education and Training OP-5 Exhibit**

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

- 3) c. Health Professions Scholarship Program Funding Reduced to Zero:\$-533
 Reduces all remaining Health Professions Scholarship Program (HPSP) funding following transfer of the HPSP to the Service Departments in the PB 2021 Defense Wide Review. Action reduces the HPSP program element funding to zero. The Health Professions Scholarship Programs (HPSP) resources the HPSP scholarships, the Financial Assistance Program (FAP), the Active Duty Health Provider Loan Repayment Program (ADHPLRP), and other pre-commissioning professional scholarship programs. The HPSP funds the military-wide initiative designed to provide financial assistance to students who are physically and academically qualified to become military officers and are interested in attaining one of several types of health-related degrees, or funds the repayment of loans from attaining critically manned health-related degrees. The FY 2021 Health Professional Scholarship program baseline funding is \$6,533K.
- 4) e. Establishment of Defense Health Agency's Safety Programs:\$-114
 Realigns Education and Training funding (-\$114K) and one (1) FTE from the Other Education and Training program element to Consolidated Health Support to establish the Defense Health Agency's Safety Program. The FY 2021 Other Education and Training program element baseline funding is \$148,289K. The FY 2021 Other Education and Training program element baseline civilian staffing is 507 FTEs.
- 5) f. Information Technology Mission Funding Realigned to the Defense Health Agency:\$-75
 Realigns Information Technology Mission funding from the Education and Training Budget Activity Group (BAG), Other Education and Training program element (-\$75K) to Information Management/Information Technology BAG (+\$75K) to consolidate budgeting and execution of non-pay information technology (IT) healthcare resources at the Defense Health Agency. The Defense Health Agency is consolidating all non-pay IT healthcare mission resources within IM/IT. The FY 2021 Other Education and Training program element baseline funding is \$148,289K. The FY 2021 Other Education and Training baseline contracting is 194 CMEs.

FY 2022 Budget Request\$333,234

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IV. Performance Criteria and Evaluation Summary:

	(Student/Trainee Count)			Change	Change
	<u>FY 2020 Actuals</u>	<u>FY 2021 Estimate</u>	<u>FY 2022 Estimate</u>	<u>FY 2020/2021</u>	<u>FY 2021/2022</u>
Officer Acquisition¹	5,557	697	697	-4,860	0
Graduate Medical Education (GME)²	5,512	4,023	4,053	-1,489	30
Medical Education and Training Campus (METC)³	22,898	31,720	30,050	8,822	-1,670
Other Training⁴	483,329	550,080	525,100	66,751	-24,980

1. Officer Acquisition programs include Health Professions Scholarship Program, Financial Assistance Program, Active Duty Health Professions Loan Repayment Program, and Nurse Candidate Program. Values represent student load for a year. Decrease in FY 2021 reflect the Service's Medical Readiness activities which occur outside of the Military Treatment Facilities transfer to the Military Departments.

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. Navy Medicine will transfer the GME program to the Department of the Navy in FY 2021.

3. Medical Education and Training Campus: The student loads illustrated were revised to accurately reflect annual workload projections based upon actual Defense Health Agency 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. Values represent student load as program lengths vary.

4. Other Training student loads illustrated were revised to accurately reflect annual workload projections 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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Education and Training OP-5 Exhibit**

V. Personnel Summary:

	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>Change FY 2020/ FY 2021</u>	<u>Change FY 2021/ FY 2022</u>
Active Military End Strength (E/S) (Total)	14,641	14,608	14,254	-33	-354
Officer	7,445	7,242	7,273	-203	31
Enlisted	7,196	7,366	6,981	170	-385
Active Military Average Strength (A/S) (Total)	14,747	14,625	14,432	-122	-193
Officer	7,470	7,344	7,258	-126	-86
Enlisted	7,277	7,281	7,174	4	-107
Civilian FTEs (Total)	2,104	1,125	1,155	-979	30
U.S. Direct Hire	2,034	1,055	1,085	-979	30
Foreign National Direct Hire	1	1	1	0	0
Total Direct Hire	2,035	1,056	1,086	-979	30
Foreign National Indirect Hire	1	1	1	0	0
Reimbursable Civilians	68	68	68	0	0
Average Annual Civilian Salary (\$ in thousands)	110.8	135.8	135.8	25.0	0.0
Contractor FTEs (Total)	270	293	279	23	-14

Personnel Summary Explanations:

Section V Explanation of Changes: The decrease from FY 2020 to FY 2021 (-33) includes the phased drawdown of transfers to the military departments for medical military E/S reductions and mission transfers to the Military Departments for Medical Readiness Programs (-33: Army: -57, Navy: +82, and Air Force -58). The decrease from FY 2021 to FY 2022 (-354) includes the Tech Adjustment made by the military departments for the revised drawdown reductions (Army: +2; Navy -281, and Air Force: -75).

Explanation of changes in Civilian FTEs: The net decrease from FY 2020 to FY 2021(-979) reflects an increase in FTEs at the USUHS (+66) to match actual execution resulting from programmatic growth requiring additional FTEs; realignment of FTEs from the Defense Health Agency (-2) to USUHS (+2) for the Medical Education Training Command, College of Applied Health Sciences; Army Medical Command's transfer of FTEs to the Department of the Army (-16); execution adjustments (-341: DHA-FOD +34, DCFM -14, Air Force -41, Navy -90, Army -95, and USUHS -135); and the transfer of education and training FTEs, following the

**Defense Health Program
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Education and Training OP-5 Exhibit**

V. Personnel Summary: (Cont.)

Defense Wide Review, to the Department of the Army (-498), the Department of the Navy (-113), and the Department of the Air Force (-77). The net increase from FY 2021 to FY 2022 (+30) reflects the adjustment to USUHS' FTEs to match program execution (+31) and a Defense Health Agency internal realignment (-1) for the Safety and Occupational Health Program.

Explanation of changes in Contractor FTEs: The increase from FY 2020 to FY 2021 (+23) reflects adjustments to other services from non-federal sources (+53), advisory and assistance contracts (+3), equipment maintenance contracts (+2) and IT contracts support services (-5) based on FY 2020 actuals; and decreases to medical care contracts (-22), other costs (medical care) (-8), associated with Army Medicine's transfer of the Health Readiness Center of Excellence to the Department of the Army, Air Force Medical Services and Navy Bureau of Medicine and Surgery's transfer of education and training contract dollars to their respective Service departments, and reduction of contractor CMEs at the Air Force's Human Performance Wing following efficiencies studies. The decrease from FY 2021 to FY 2022 (-14) reflects downward adjustments to the other services from non-federal sources (-14) 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 2020 Program	Change from FY 2020 to FY 2021		FY 2021 Program	Change from FY 2021 to FY 2022		FY 2022 Program
		Price Growth	Program Growth		Price Growth	Program Growth	
101 EXEC, GEN'L & SPEC SCHEDS	221,186	3,406	-84,547	140,045	3,179	428	143,652
103 WAGE BOARD	4,261	66	-924	3,403	77	438	3,918
104 FN DIRECT HIRE (FNDH)	60	1	0	61	1	1	63
0199 TOTAL CIVILIAN PERSONNEL COMPENSATION	225,507	3,473	-85,471	143,509	3,257	867	147,633
308 TRAVEL OF PERSONS	39,967	799	-18,760	22,006	418	-347	22,077
0399 TOTAL TRAVEL	39,967	799	-18,760	22,006	418	-347	22,077
401 DLA ENERGY (FUEL PRODUCTS)	56	-3	-31	22	2	-2	22
411 ARMY SUPPLY	32	1	-33	0	0	0	0
412 NAVY MANAGED SUPPLY, MATL	1,637	66	-418	1,285	107	-78	1,314
414 AIR FORCE CONSOL SUST AG (SUPPLY)	4	0	-1	3	0		3
416 GSA SUPPLIES & MATERIALS	2,125	43	-1,106	1,062	20	8	1,090
417 LOCAL PURCH SUPPLIES & MAT	619	12	-183	448	9	0	457
422 DLA MAT SUPPLY CHAIN (MEDICAL)	42	0	-11	31	0	1	32
0499 TOTAL DEFENSE WORKING CAPITAL FUND SUPPLIES AND MATERIALS	4,515	119	-1,783	2,851	138	-71	2,918
503 NAVY FUND EQUIPMENT	1,106	44	-666	484	40	-28	496
506 DLA MAT SUPPLY CHAIN (CONST & EQUIP)	668	-1	-201	466	10	-2	474
507 GSA MANAGED EQUIPMENT	914	18	-374	558	11	-3	566
0599 TOTAL DEFENSE WORKING CAPITAL FUND EQUIPMENT PURCHASES	2,688	61	-1,241	1,508	61	-33	1,536
614 SPACE & NAVAL WARFARE CENTER	6,750	422	-6,289	883	4	11	898
671 DISA DISN SUBSCRIPTION SERVICES (DSS)	43	2	16	61	5	-4	62
0699 TOTAL OTHER FUND PURCHASES	6,793	424	-6,273	944	9	7	960
706 AMC CHANNEL PASSENGER	1,526	27	-1,553	0	0	0	0
707 AMC TRAINING	10	-1	-9	0	0	0	0

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

	FY 2020 <u>Program</u>	Change from FY 2020 to FY 2021		FY 2021 <u>Program</u>	Change from FY 2021 to FY 2022		FY 2022 <u>Program</u>
		<u>Price Growth</u>	<u>Program Growth</u>		<u>Price Growth</u>	<u>Program Growth</u>	
771 COMMERCIAL TRANSPORT	464	9	-10	463	9	0	472
0799 TOTAL TRANSPORTATION	2,000	35	-1,572	463	9	0	472
901 FOREIGN NATIONAL INDIRECT HIRE (FNIH)	4	0		4	0		4
913 PURCHASED UTILITIES (NON-FUND)	33	1	-34	0	0	0	0
914 PURCHASED COMMUNICATIONS (NON-FUND)	78	2	222	302	6	0	308
915 RENTS (NON-GSA)	386	8	333	727	14	1	742
917 POSTAL SERVICES (U.S.P.S)	2	0	15	17	0		17
920 SUPPLIES & MATERIALS (NON-FUND)	31,788	636	-3,896	28,528	542	-226	28,844
921 PRINTING & REPRODUCTION	931	19	-71	879	17	-50	846
922 EQUIPMENT MAINTENANCE BY CONTRACT	3,214	64	-1,881	1,397	27	772	2,196
923 FACILITIES SUST, REST, & MOD BY CONTRACT	8,175	164	-8,339	0	0	0	0
925 EQUIPMENT PURCHASES (NON-FUND)	26,731	535	-8,527	18,739	356	6,270	25,365
927 AIR DEF CONTRACTS & SPACE SUPPORT (AF)	1,305	26	-1,331	0	0	0	0
930 OTHER DEPOT MAINTENANCE (NON-FUND)	43	1	-44	0	0	0	0
932 MGT PROF SUPPORT SVCS	10,246	205	-8,896	1,555	30	4	1,589
934 ENGINEERING & TECH SVCS TRAINING AND LEADERSHIP DEVELOPMENT (OTHER CONTRACTS)	526	11	-537	0	0	0	0
936	2,220	44	-2,264	0	0	0	0
955 OTHER COSTS (MEDICAL CARE)	262,238	9,178	-264,883	6,533	255	-6,788	0
964 OTHER COSTS (SUBSISTENCE AND SUPPORT OF PERSONS)	1,664	33	-1,165	532	10	-1	541
986 MEDICAL CARE CONTRACTS	7,171	280	-5,068	2,383	93	791	3,267
987 OTHER INTRA-GOVT PURCH	9,801	196	5,581	15,578	296	-400	15,474
988 GRANTS	28,377	568	14,459	43,404	825	-13,912	30,317
989 OTHER SERVICES	62,921	1,258	-22,636	41,543	789	3,645	45,977
990 IT CONTRACT SUPPORT SERVICES	7,476	150	-5,343	2,283	43	-175	2,151
0999 TOTAL OTHER PURCHASES	465,330	13,379	-314,305	164,404	3,303	-10,069	157,638
9999 GRAND TOTAL	746,800	18,290	-429,405	335,685	7,195	-9,646	333,234

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

**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2022 Budget Estimates
Base Operations/Communications OP-5 Exhibit**

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.

Demolition/Disposal of Excess Facilities - Resources required for demolition and/or disposal costs associated with excess facilities, including buildings or any other permanent or temporary structure as well as pavements, utility systems, and other supporting infrastructure. Includes environmental costs directly attributable to demolition/disposal to include inspection and removal of hazardous material (such as lead-based paint or asbestos).

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 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 2021							FY 2022 Request
	FY 2020 Actuals	Budget Request	Congressional Action			Current Estimate		
			Amount	Percent	Appropriated			
A. BA Subactivities								
1. Facility Restoration/Modernization - CONUS	\$279,345	\$296,316	\$0	0.00%	\$296,316	\$296,316	\$279,253	
2. Facility Restoration/Modernization - OCONUS	\$73,172	\$94,665	\$0	0.00%	\$94,665	\$94,665	\$96,175	
3. Facility Sustainment - CONUS	\$560,626	\$450,046	\$29,505	6.56%	\$479,551	\$480,976	\$460,751	
4. Facility Sustainment - OCONUS	\$131,464	\$140,059	\$0	0.00%	\$140,059	\$138,152	\$140,903	
5. Facilities Operations - Health Care (CONUS)	\$493,589	\$461,935	\$-16,213	-3.51%	\$445,722	\$446,318	\$475,676	
6. Facilities Operations - Health Care (OCONUS)	\$65,987	\$55,117	\$-560	-1.02%	\$54,557	\$54,492	\$56,067	
7. Base Communications - CONUS	\$47,423	\$49,609	\$-200	-0.40%	\$49,409	\$49,614	\$50,696	
8. Base Communications - OCONUS	\$4,802	\$3,403	\$-100	-2.94%	\$3,303	\$3,215	\$3,198	
9. Base Operations - CONUS	\$290,916	\$318,907	\$5,414	1.70%	\$324,321	\$325,414	\$313,864	
10. Base Operations - OCONUS	\$4,117	\$23,276	\$0	0.00%	\$23,276	\$23,792	\$24,183	
11. Pollution Prevention	\$394	\$292	\$0	0.00%	\$292	\$292	\$298	
12. Environmental Compliance	\$18,563	\$19,647	\$-241	-1.23%	\$19,406	\$19,432	\$18,078	
13. Visual Information Systems	\$5,320	\$9,333	\$0	0.00%	\$9,333	\$7,532	\$7,723	
Total	\$1,975,718	\$1,922,605	\$17,605	0.92%	\$1,940,210	\$1,940,210	\$1,926,865	

1. FY 2020 actuals include \$81,858K CARES Act COVID-19 funding
2. FY 2020 actuals include -\$166,379K, reprogrammed to IMIT and Cybersecurity requirements (+\$105,868K) and to Other Consolidated Health Support (+\$60,511K).
3. FY 2020 actuals include \$10,000K for Fisher House funds provided in Section 8068 of the FY 2020 Consolidated Appropriations Act.
4. FY 2020 actuals excludes \$122,774K FY 2019/2020 Carryover execution.
5. FY 2021 Restoration and Modernization request includes one-time increase of \$31,300K for Natural Disaster Recovery.
6. FY 2021 Congressional Adjustment includes \$10,000K for Fisher House funds provided in Section 8068 of the FY 2021 Consolidated Appropriations Act.

**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	FY 2021/FY 2021	FY 2021/FY 2022
	\$1,922,605	\$1,940,210
Congressional Adjustments (Distributed)	7,605	
Congressional Adjustments (Undistributed)	0	
Adjustments to Meet Congressional Intent	0	
Congressional Adjustments (General Provisions)	10,000	
SUBTOTAL APPROPRIATED AMOUNT	1,940,210	
Fact-of-Life Changes (2021 to 2021 Only)	0	
SUBTOTAL BASELINE FUNDING	1,940,210	
Supplemental	0	
Reprogrammings	0	
Price Changes		36,053
Functional Transfers		0
Program Changes		-49,398
CURRENT ESTIMATE	1,940,210	1,926,865
Less: Wartime Supplemental	0	
NORMALIZED CURRENT ESTIMATE	\$1,940,210	\$1,926,865

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

FY 2021 President's Budget Request (Amended, if applicable)	\$1,922,605
1. Congressional Adjustments	\$17,605
a) Distributed Adjustments	\$7,605
1) FSRM Funding Restoral	\$29,505
2) Historical Underexecution	\$-21,900
b) Undistributed Adjustments	\$0
c) Adjustments to Meet Congressional Intent.....	\$0
d) General Provisions	\$10,000
1) Section 8068: Provision for Fisher House Funding	\$10,000
FY 2021 Appropriated Amount	\$1,940,210
2. War-Related and Disaster Supplemental Appropriations.....	\$0
a) OCO 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 2021 Baseline Funding.....	\$1,940,210
4. Reprogrammings (Requiring 1415 Actions).....	\$0
a) Increases.....	\$0
b) Decreases.....	\$0
Revised FY 2021 Estimate.....	\$1,940,210
5. Less: Item 2, War-Related and Disaster Supplemental Appropriation and Item 4, Reprogrammings.....	\$0
a) Less: OCO Supplemental Funding.....	\$0
FY 2021 Normalized Current Estimate.....	\$1,940,210
6. Price Change.....	\$36,053
7. Functional Transfers.....	\$0
a) Transfers In.....	\$0
b) Transfers Out.....	\$0
8. Program Increases.....	\$3,621
a) Annualization of New FY 2021 Program.....	\$0
b) One-Time FY 2022 Increases.....	\$0

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

c) Program Growth in FY 2022.....	\$3,621
1) a. Federal Employee Retirement System – Agency Contribution Rate Assumption:.....	\$1,663
Increases civilian personnel costs to reflect the revised Federal Employee Retirement System (FERS) Agency Contribution for FY 2022 in accordance with Office of Management and Budget (OMB) Circular No. A-11. The FERS FY 2022 regular employee rate is 18.4%, which is a 1.1% increase above the FY 2021 rate of 17.3%. The FY 2021 Base Operations/Communications baseline civilian funding is \$214,551K. The FY 2021 Base Operations/Communications baseline civilian staffing is 2,086 FTEs.	
2) b. Fiscal Year 2022 Performance Awards:.....	\$1,252
Increases the FY 2022 civilian personnel awards budget at the aggregate level for General Schedule (GS) and Wage Grade employees in accordance with the Office of Management and Budget (OMB) Circular No. A-11 direction to increase civilian awards spending by no less than one (1) percentage point of FY 2020 GS and Wage Grade salary spending. Increase reflects additional civilian award funding of one (1) percentage point of the GS and Wage Grade salary spending above the FY 2020 awards budget of 1.5%. The FY 2021 Base Operations/Communications baseline civilian funding is \$214,551K. The FY 2021 Base Operations/Communications baseline civilian staffing request is 2,086 FTEs.	
3) c. Civilian Pay Raise Assumptions:.....	\$706
Increase required to fund civilian personnel costs for the net effect of the Civilian Pay Raise Assumptions which was increased from 1.0% to 2.7%. The FY 2021 Base Operations/Communications Civilian Pay baseline funding is \$214,551K. The FY 2021 Base Operations/Communications baseline civilian staffing is 2,086 FTEs.	
9. Program Decreases	-\$53,019
a) Annualization of FY 2021 Program Decreases	\$0
b) One-Time FY 2021 Increases	-\$31,300
1) Natural Disaster Recovery	-\$31,300
Adjustment to reverse one-time Natural Disaster Recovery funding which was issued for Initial Outfitting requirements to support MILCON associated with 2017 Hurricane Disasters. The FY 2021 Facilities Restoration and Modernization–CONUS baseline funding is \$296,316K.	

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

c) Program Decreases in FY 2022	\$-21,719
1) a. General Fund Enterprise Business System (GFEBS) Deployment:	\$-7,000
<p>Realign funds from Defense Health Program, Operations and Maintenance, Base Operations (-\$7,000K) to Research, Development Test and Evaluation (+\$4,000K) and Procurement (+3,000K) for continued development of the Defense Health Program Financial Management System, GFEBS. The FY 2021 Base Operations/Communications baseline funding is \$1,940,210K. The FY 2021 Base Operations/Communications baseline civilian staffing is 2,086 FTEs. The FY 2021 Base Operations/Communications baseline contracting is 919 CMEs.</p>	
2) b. Defense Health Program Reform Management - Contract Efficiencies:	\$-8,558
<p>Contracts requirements were reduced based on projected savings from consolidations as the Defense Health Agency assumes authority, direction and control of the Military Treatment Facilities (MTF) Healthcare Delivery operations. Purchased services savings will be realized by increased contract standardization and elimination of duplicative contracts. This includes centralized contracts that support the MTFs, such as Base Operations Support from the Civilian Human Resources Agency and based communication support. The FY 2021 Base Operations/Communications baseline funding is \$1,940,210K. The FY 2021 Base Operations/Communications baseline contracting is 919 CMEs.</p>	
3) c. Clinical Investigations Program Realigned to Consolidated Health Support:	\$-3,795
<p>Realigns the Clinical Investigations Program (CIP) and Science & Technology (S&T) program and associated resources from Base Operations (-\$3,795K) to Consolidated Health Support to consolidate the program under the authority, direction and control of the Defense Health Agency. Funding for non-pay requirement were realigned to the Defense Health Agency to support execution of the program in accordance with DoDI 6000.08. The CIP and S&T establishes DoD policy, assigns responsibilities and provides procedures for funding and administration of Research and Clinical Investigation Programs funded by the Defense Health Program (DHP) appropriation. It is an essential component of medical care and teaching, and supports the Graduate Health Sciences Education and other health programs of the Military Services. The program also supports development and employment of health readiness solutions that protect, treat, and optimize total force health and performance. The FY 2021 Base Operations/Communications baseline funding is \$1,940,210K. The FY 2021 Base Operations/Communications baseline contracting is 919 CMEs.</p>	

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

4) d. Information Technology Funding Realigned to Information Management/Information Technology:.....\$-2,366
Realigns funding from Base Operations (-\$2,366K) to Information Management/Information Technology (\$2,366K) to account for the budgeting and execution of non-pay information technology (IT) healthcare resources at the Defense Health Agency. The Defense Health Agency is consolidating all non-pay IT healthcare mission resources within IM/IT. The FY 2021 Base Operations/Communications baseline funding is \$1,940,210K. The FY 2021 Base Operations/Communications baseline civilian staffing is 2,086 FTEs. The FY 2021 Base Operations/Communications baseline contracting is 919 CMEs.

FY 2022 Budget Request\$1,926,865

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IV. Performance Criteria and Evaluation Summary:

	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>Change FY 2020/2021</u>	<u>Change FY 2021/2022</u>
Facility Sustainment Funding:	644,853	590,105	601,454	-54,748	11,349
Facility Sustainment Model Requirement:	664,940	655,877	674,839	-9,063	18,962
Sustainment Rate (MILPERS not included):	97%	90%	89%		

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 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>Change FY 2020/ FY 2021</u>	<u>Change FY 2021/ FY 2022</u>
Active Military End Strength (E/S) (Total)	1,292	1,197	1,048	-95	-149
Officer	312	255	319	-57	64
Enlisted	980	942	729	-38	-213
Active Military Average Strength (A/S) (Total)	1,742	1,245	1,123	-497	-122
Officer	406	284	287	-122	3
Enlisted	1,336	961	836	-375	-125
Civilian FTEs (Total)	1,266	2,086	2,086	820	0
U.S. Direct Hire	1,187	1,907	1,907	720	0
Foreign National Direct Hire	36	60	60	24	0
Total Direct Hire	1,223	1,967	1,967	744	0
Foreign National Indirect Hire	24	100	100	76	0
Reimbursable Civilians	19	19	19	0	0
Average Annual Civilian Salary (\$ in thousands)	108.7	104.6	109.0	-4.1	4.4
Contractor FTEs (Total)	516	919	536	403	-383

Personnel Summary Explanations:

Explanation of changes in Active Military End Strength: The decrease from FY 2020 to FY 2021 (-286) includes transfers to the military departments for internal realignments and medical readiness programs (Navy: -287) and one transfer back for the revised military drawdown (Army: +1). The net change from FY 2021 to FY 2022 (0) included the Tech Adjustment made by the military departments for the revised drawdown reductions (Army: -1; Navy: +1).

Explanation of changes in Civilian FTEs: The net increase from FY 2020 to FY 2021 (820) reflects the transfer of Base Operations FTEs, following the Defense Wide Review, to the Department of the Department of the Navy (-167) and the Department of the Air Force (-18); realignment of the Office of the General Counsel's FTEs to the Defense Health Agency, Management Activities from National Capital Region Medical Directorate (-24); execution adjustments for a technical correction (-1), and FY 2020 execution adjustments (+1030: Army: +129, Direct Care Financial Management: +34, Defense Health Agency: +2, Air Force:

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V. Personnel Summary: (Cont.)

-5, Uniformed Services University of the Health Sciences: -5 and Navy: +875 for Common Cost Accounting Structure realignment of FTEs from Base Operations and Communications to Consolidated Health Support Budget Activity Group). The change from FY 2021 to FY 2022 is zero (0) for Base Operations.

Explanation of changes in Contractor FTEs: The increase from FY 2020 to FY 2021 (+403) relates to staffing for Facilities Sustainment activities and Facilities Enterprise Division staffing as the DHP mission migrates under the Defense Health Agency from the Services' Medical Components. 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.

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

	FY 2020 Program	Change from FY 2020 to FY 2021		FY 2021 Program	Change from FY 2021 to FY 2022		FY 2022 Program
		Price Growth	Program Growth		Price Growth	Program Growth	
101 EXEC, GEN'L & SPEC SCHEDS	110,046	1,695	72,112	183,853	4,173	1,432	189,458
103 WAGE BOARD	21,940	338	5,216	27,494	624	1,933	30,051
104 FN DIRECT HIRE (FNDH)	1,663	26	1,187	2,876	65	705	3,646
105 SEPARATION LIABILITY (FNDH)	45	1	-1	45	1	-1	45
106 BENEFIT TO FMR EMPLOYEES	0	0	0	0	0	1	1
107 VOLUNTARY SEP INCENTIVES	41	1	-1	41	1	-2	40
0199 TOTAL CIVILIAN PERSONNEL COMPENSATION	133,735	2,061	78,513	214,309	4,864	4,068	223,241
308 TRAVEL OF PERSONS	13,476	270	-2,672	11,074	210	18	11,302
0399 TOTAL TRAVEL	13,476	270	-2,672	11,074	210	18	11,302
401 DLA ENERGY (FUEL PRODUCTS)	2,713	-138	152	2,727	275	-220	2,782
402 SERVICE FUND FUEL	121	-6	-37	78	8	-7	79
412 NAVY MANAGED SUPPLY, MATL	282	11	-112	181	15	-12	184
414 AIR FORCE CONSOL SUST AG (SUPPLY)	14	1	-15	0	0	0	0
416 GSA SUPPLIES & MATERIALS	420	8	-141	287	5		292
417 LOCAL PURCH SUPPLIES & MAT	2,666	53	-841	1,878	36	0	1,914
422 DLA MAT SUPPLY CHAIN (MEDICAL)	358	1	-123	236	0	4	240
0499 TOTAL DEFENSE WORKING CAPITAL FUND SUPPLIES AND MATERIALS	6,574	-70	-1,117	5,387	339	-235	5,491
503 NAVY FUND EQUIPMENT	90	4	77	171	14	-12	173
507 GSA MANAGED EQUIPMENT	105	2	98	205	4	-2	207
0599 TOTAL DEFENSE WORKING CAPITAL FUND EQUIPMENT PURCHASES	195	6	175	376	18	-14	380
611 NAVY SURFACE WARFARE CTR	734	60	-794	0	0	0	0
614 SPACE & NAVAL WARFARE CENTER	734	46	-780	0	0	0	0
631 NAVY BASE SUPPORT (NFESC)	1,156	20	137	1,313	55	-41	1,327
633 DLA DOCUMENT SERVICES	734	5	-739	0	0	0	0

**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2022 Budget Estimates
Base Operations/Communications OP-5 Exhibit**

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

	FY 2020 <u>Program</u>	Change from FY 2020 to FY 2021		FY 2021 <u>Program</u>	Change from FY 2021 to FY 2022		FY 2022 <u>Program</u>
		<u>Price Growth</u>	<u>Program Growth</u>		<u>Price Growth</u>	<u>Program Growth</u>	
634 NAVFEC (UTILITIES AND SANITATION)	12,219	220	15,544	27,983	0	1,535	29,518
635 NAVY BASE SUPPORT (NAVFEC OTHER SUPPORT SERVICES)	15,513	279	36,336	52,128	0	-8,765	43,363
647 DISA ENTERPRISE COMPUTING CENTERS	0	0	318	318	0	7	325
671 DISA DISN SUBSCRIPTION SERVICES (DSS)	3,109	149	-1,167	2,091	160	-160	2,091
675 DLA DISPOSITION SERVICES	734	0	-734	0	0	0	0
677 DISA TELECOMM SVCS - REIMBURSABLE	185	0	-185	0	0	0	0
679 COST REIMBURSABLE PURCHASE	804	0	275	1,079	0	22	1,101
680 BUILDING MAINT FUND PURCH	0	0	42,447	42,447	424	424	43,295
691 DFAS FINANCIAL OPERATIONS (ARMY)	7,254	-230	7,771	14,795	-420	2,333	16,708
692 DFAS FINANCIAL OPERATIONS (NAVY)	12,858	888	-7,055	6,691	-473	1,540	7,758
693 DFAS FINANCIAL OPERATIONS (AIR FORCE)	3,691	638	-1,890	2,439	-51	978	3,366
696 DFAS FINANCIAL OPERATION (OTHER DEFENSE AGENCIES)	12,204	3,274	-5,830	9,648	1,001	-709	9,940
0699 TOTAL OTHER FUND PURCHASES	71,929	5,349	83,654	160,932	696	-2,836	158,792
706 AMC CHANNEL PASSENGER	8	0	-8	0	0	0	0
707 AMC TRAINING	16	-1	-15	0	0	0	0
719 SDDC CARGO OPS-PORT HNDLG	817	-221	579	1,175	337	-314	1,198
771 COMMERCIAL TRANSPORT	999	20	514	1,533	29	1	1,563
0799 TOTAL TRANSPORTATION	1,840	-202	1,070	2,708	366	-313	2,761
901 FOREIGN NATIONAL INDIRECT HIRE (FNIH)	1,766	35	109	1,910	43	108	2,061
912 RENTAL PAYMENTS TO GSA (SLUC)	6,811	136	14,893	21,840	415	119	22,374
913 PURCHASED UTILITIES (NON-FUND)	245,660	4,913	-32,752	217,821	4,139	10,919	232,879
914 PURCHASED COMMUNICATIONS (NON-FUND)	25,860	517	12,215	38,592	733	3,042	42,367
915 RENTS (NON-GSA)	80,032	1,601	-59,820	21,813	414	819	23,046
917 POSTAL SERVICES (U.S.P.S)	1,771	35	340	2,146	41	-2	2,185
920 SUPPLIES & MATERIALS (NON-FUND)	9,313	186	8,385	17,884	340	10,497	28,721
921 PRINTING & REPRODUCTION	11,185	224	-7,386	4,023	76	2	4,101

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

	FY 2020 Program	Change from FY 2020 to FY 2021		FY 2021 Program	Change from FY 2021 to FY 2022		FY 2022 Program
		Price Growth	Program Growth		Price Growth	Program Growth	
922 EQUIPMENT MAINTENANCE BY CONTRACT	8,736	175	-423	8,488	161	219	8,868
923 FACILITIES SUST, REST, & MOD BY CONTRACT	697,284	13,946	-263,464	447,766	8,508	-72,119	384,155
924 PHARMACEUTICAL DRUGS	6,947	271	-7,218	0	0	0	0
925 EQUIPMENT PURCHASES (NON-FUND)	15,107	302	-5,764	9,645	183	49,551	59,379
926 OTHER OVERSEAS PURCHASES	594	12	-606	0	0	0	0
930 OTHER DEPOT MAINTENANCE (NON-FUND)	619	12	-273	358	7	-8	357
932 MGT PROF SUPPORT SVCS	51,576	1,032	-41,200	11,408	217	5,799	17,424
933 STUDIES, ANALYSIS & EVAL	1,575	32	-1,607	0	0	108	108
934 ENGINEERING & TECH SVCS	1,157	23	255	1,435	27	-60	1,402
936 TRAINING AND LEADERSHIP DEVELOPMENT (OTHER CONTRACTS)	8	0	-8	0	0	0	0
937 LOCALLY PURCHASED FUEL (NON-FUND)	1,780	36	65	1,881	36	-5	1,912
955 OTHER COSTS (MEDICAL CARE)	15,665	611	-9,121	7,155	279	-206	7,228
957 OTHER COSTS (LAND AND STRUCTURES)	218,036	4,361	168,975	391,372	7,436	-24,428	374,380
960 OTHER COSTS (INTEREST AND DIVIDENDS)	50	1	-51	0	0	0	0
964 OTHER COSTS (SUBSISTENCE AND SUPPORT OF PERSONS)	17	0	-17	0	0	0	0
986 MEDICAL CARE CONTRACTS	2,204	86	39	2,329	91	-1,737	683
987 OTHER INTRA-GOVT PURCH	186,313	3,726	-19,730	170,309	3,236	-11,560	161,985
988 GRANTS	0	0	10,000	10,000	190	-10,190	0
989 OTHER SERVICES	143,057	2,861	-31,148	114,770	2,181	3,850	120,801
990 IT CONTRACT SUPPORT SERVICES	14,846	297	27,336	42,479	807	-14,804	28,482
0999 TOTAL OTHER PURCHASES	1,747,969	35,431	-237,976	1,545,424	29,560	-50,086	1,524,898
9999 GRAND TOTAL	1,975,718	42,845	-78,353	1,940,210	36,053	-49,398	1,926,865

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**Defense Health Program
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Facilities, Sustainment, Restoration, Modernization and Demolition OP-5 Exhibit**

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

	FY 2020 Program	Change from FY 2020 to FY 2021		FY 2021 Program	Change from FY 2021 to FY 2022		FY 2022 Program
		Price Growth	Program Growth		Price Growth	Program Growth	
101 EXEC, GEN'L & SPEC SCHEDS	17,232	265	-3,505	13,992	318	404	14,714
103 WAGE BOARD	17,016	262	-6,434	10,844	246	-20	11,070
104 FN DIRECT HIRE (FNDH)	724	11	-735	0	0	710	710
105 SEPARATION LIABILITY (FNDH)	26	0		26	1	-1	26
0199 TOTAL CIVILIAN PERSONNEL COMPENSATION	34,998	538	-10,674	24,862	565	1,093	26,520
308 TRAVEL OF PERSONS	62	1	281	344	7	0	351
0399 TOTAL TRAVEL	62	1	281	344	7	0	351
401 DLA ENERGY (FUEL PRODUCTS)	73	-4	91	160	16	-12	164
402 SERVICE FUND FUEL	18	-1	-16	1	0		1
412 NAVY MANAGED SUPPLY, MATL	253	10	-185	78	6	-4	80
414 AIR FORCE CONSOL SUST AG (SUPPLY)	14	1	-15	0	0	0	0
416 GSA SUPPLIES & MATERIALS	370	7	-260	117	2		119
417 LOCAL PURCH SUPPLIES & MAT	2,343	47	-1,636	754	14	1	769
422 DLA MAT SUPPLY CHAIN (MEDICAL)	317	0	-218	99	0	2	101
0499 TOTAL DEFENSE WORKING CAPITAL FUND SUPPLIES AND MATERIALS	3,388	60	-2,239	1,209	38	-13	1,234
503 NAVY FUND EQUIPMENT	48	2	-21	29	2	-2	29
507 GSA MANAGED EQUIPMENT	60	1	-24	37	1	0	38
0599 TOTAL DEFENSE WORKING CAPITAL FUND EQUIPMENT PURCHASES	108	3	-45	66	3	-2	67
611 NAVY SURFACE WARFARE CTR	734	60	-794	0	0	0	0
614 SPACE & NAVAL WARFARE CENTER	734	46	-780	0	0	0	0
631 NAVY BASE SUPPORT (NFESC)	1,148	20	-244	924	39	-20	943
633 DLA DOCUMENT SERVICES	734	5	-739	0	0	0	0
634 NAVFEC (UTILITIES AND SANITATION)	734	13	-747	0	0	0	0
635 NAVY BASE SUPPORT (NAVFEC OTHER SUPPORT SERVICES)	13,876	250	21,522	35,648	0	-9,164	26,484

**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2022 Budget Estimates
Facilities, Sustainment, Restoration, Modernization and Demolition OP-5 Exhibit**

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

	FY 2020 <u>Program</u>	Change from FY 2020 to FY 2021		FY 2021 <u>Program</u>	Change from FY 2021 to FY 2022		FY 2022 <u>Program</u>
		<u>Price Growth</u>	<u>Program Growth</u>		<u>Price Growth</u>	<u>Program Growth</u>	
671 DISA DISN SUBSCRIPTION SERVICES (DSS)	157	8	-165	0	0	0	0
675 DLA DISPOSITION SERVICES	734	0	-734	0	0	0	0
677 DISA TELECOMM SVCS - REIMBURSABLE	170	0	-170	0	0	0	0
679 COST REIMBURSABLE PURCHASE	734	0	-734	0	0	0	0
692 DFAS FINANCIAL OPERATIONS (NAVY)	1,185	82	-1,267	0	0	0	0
0699 TOTAL OTHER FUND PURCHASES	20,940	484	15,148	36,572	39	-9,184	27,427
719 SDDC CARGO OPS-PORT HNDLG	734	-198	-536	0	0	0	0
771 COMMERCIAL TRANSPORT	25	1	-17	9	0		9
0799 TOTAL TRANSPORTATION	759	-197	-553	9	0	0	9
901 FOREIGN NATIONAL INDIRECT HIRE (FNIH)	248	5	-130	123	3	-1	125
913 PURCHASED UTILITIES (NON-FUND)	443	9	-452	0	0	0	0
914 PURCHASED COMMUNICATIONS (NON-FUND)	194	4	-190	8	0		8
915 RENTS (NON-GSA)	158	3	-161	0	0	0	0
917 POSTAL SERVICES (U.S.P.S)	102	2	-104	0	0	0	0
920 SUPPLIES & MATERIALS (NON-FUND)	2,761	55	3,615	6,431	122	9,916	16,469
922 EQUIPMENT MAINTENANCE BY CONTRACT	2,016	40	-267	1,789	34	252	2,075
923 FACILITIES SUST, REST, & MOD BY CONTRACT	562,015	11,240	-152,428	420,827	7,996	-74,304	354,519
924 PHARMACEUTICAL DRUGS	6,592	257	-6,849	0	0	0	0
925 EQUIPMENT PURCHASES (NON-FUND)	9,603	192	-8,335	1,460	28	48,992	50,480
926 OTHER OVERSEAS PURCHASES	594	12	-606	0	0	0	0
930 OTHER DEPOT MAINTENANCE (NON-FUND)	117	2	-119	0	0	0	0
932 MGT PROF SUPPORT SVCS	154	3	-157	0	0	0	0
933 STUDIES, ANALYSIS & EVAL	154	3	-157	0	0	0	0
934 ENGINEERING & TECH SVCS	783	16	-799	0	0	0	0
937 LOCALLY PURCHASED FUEL (NON-FUND)	14	0	-14	0	0	0	0
955 OTHER COSTS (MEDICAL CARE)	2,378	93	-2,471	0	0	0	0

**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2022 Budget Estimates
Facilities, Sustainment, Restoration, Modernization and Demolition OP-5 Exhibit**

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

	FY 2020 <u>Program</u>	Change from FY 2020 to FY 2021		FY 2021 <u>Program</u>	Change from FY 2021 to FY 2022		FY 2022 <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)	216,591	4,332	170,058	390,981	7,429	-24,429	373,981
964 OTHER COSTS (SUBSISTENCE AND SUPPORT OF PERSONS)	6	0	-6	0	0	0	0
987 OTHER INTRA-GOVT PURCH	106,399	2,128	-39,816	68,711	1,306	-4,033	65,984
989 OTHER SERVICES	72,903	1,458	-17,644	56,717	1,078	38	57,833
990 IT CONTRACT SUPPORT SERVICES	127	3	-130	0	0	0	0
0999 TOTAL OTHER PURCHASES	984,352	19,857	-57,162	947,047	17,996	-43,569	921,474
9999 GRAND TOTAL	1,044,607	20,746	-55,244	1,010,109	18,648	-51,675	977,082

1. FY 2020 actuals includes CARES Act COVID-19: Facility Restoration and Modernization +\$19,307K, Facility Sustainment \$1,970K, Facility Operations \$60,589K.
2. FY 2020 actuals includes -\$166,379K funds reprogrammed to IMIT requirements +\$105,868K and to Other Consolidated Health Support +60,511K.
3. FY 2020 actuals excludes \$122,774K for Restoration and Modernization projects funded with FY 2019/2020 Carryover.
4. FY 2021 Facility Restoration and Modernization includes one-time increase of \$31,300K for Natural Disaster Recovery requirements.

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**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2022 Budget Estimates
Cost of Medical Activities**

(Dollars in Thousands)

		FY 2020	FY 2021	FY 2022	FY 2020/2021		FY 2021/2022	
		Actual¹	Enacted²	Request³	Change	Percent	Change	Percent
<u>In-House Care</u>								
0807700DHA	Defense Medical Centers, Hospitals and Medical Clinics-CONUS	7,401,204	6,601,649	7,036,148	-799,555	-10.8%	434,499	6.6%
0807900DHA	Defense Medical Centers, Hospitals and Medical Clinics-OCONUS	519,990	464,566	524,277	-55,424	-10.7%	59,711	12.9%
0807701DHA	Pharmaceuticals-CONUS	1,326,573	1,417,454	1,515,825	90,881	6.9%	98,371	6.9%
0807901DHA	Pharmaceuticals-OCONUS	118,409	153,016	151,875	34,607	29.2%	-1,141	-0.7%
0807715DHA	Dental Care Activities-CONUS	433,463	401,872	452,109	-31,591	-7.3%	50,237	12.5%
0807915DHA	Dental Care Activities-OCONUS	38,441	34,866	39,770	-3,575	-9.3%	4,904	14.1%
	Subtotal In-House Care	9,838,080	9,073,423	9,720,004	-764,657	-7.8%	646,581	7.1%
<u>Private Sector Care</u>								
0807702DHA	Pharmaceuticals - Purchased Health Care	889,409	821,176	924,136	-68,233	-7.7%	102,960	12.5%
0807703DHA	Pharmaceuticals - National Retail Pharmacy	1,085,340	1,015,558	1,167,994	-69,782	-6.4%	152,436	15.0%
0807723DHA	TRICARE Managed Care Support (MCS) Contracts	6,727,943	6,205,931	7,430,699	-522,012	-7.8%	1,224,768	19.7%
0807738DHA	MTF Enrollees - Purchased Care	2,900,054	3,451,814	3,451,422	551,760	19.0%	-392	0.0%
0807741DHA	Dental - Purchased Care	291,234	305,613	338,242	14,379	4.9%	32,629	10.7%
0807742DHA	Uniformed Services Family Health Program (USFHP)	568,018	594,611	609,276	26,593	4.7%	14,665	2.5%
0807743DHA	Supplemental Care - Health Care	1,487,356	1,567,400	1,800,774	80,044	5.4%	233,374	14.9%
0807745DHA	Supplemental Care - Dental	113,435	98,918	109,812	-14,517	-12.8%	10,894	11.0%
0807747DHA	Continuing Health Education/Capitalization of Assets Program	335,029	344,021	470,703	8,992	2.7%	126,682	36.8%
0807749DHA	Overseas Purchased Health Care	358,592	257,980	386,603	-100,612	-28.1%	128,623	49.9%
0807751DHA	Miscellaneous Purchased Health Care	1,011,405	1,220,432	1,291,771	209,027	20.7%	71,339	5.8%
0807752DHA	Miscellaneous Support Activities	138,881	124,911	110,933	-13,970	-10.1%	-13,978	-11.2%
	Subtotal Private Sector Care	15,906,696	16,008,365	18,092,679	101,669	0.6%	2,084,314	13.0%
<u>Consolidated Health Support</u>								
0801720DHA	Examining Activities	101,522	10,936	10,992	-90,586	-89.2%	56	0.5%
0807714DHA	Other Health Activities	458,129	375,472	417,122	-82,657	-18.0%	41,650	11.1%
0807705DHA	Military Public/Occupational Health	545,594	458,239	615,913	-87,355	-16.0%	157,674	34.4%
0807760DHA	Veterinary Services	30,184	3,641	3,723	-26,543	-87.9%	82	2.3%
0807724DHA	Military Unique Requirements - Other Medical	764,108	452,118	460,106	-311,990	-40.8%	7,988	1.8%
0807725DHA	Aeromedical Evacuation System	72,258	4,803	2,470	-67,455	-93.4%	-2,333	-48.6%
0807730DHA	Service Support to Other Health Activities - TRANSCOM	873	691	479	-182	-20.8%	-212	-30.7%
0807786DHA	Joint Pathology Center (JPC)	48,732	29,107	28,280	-19,625	-40.3%	-827	-2.8%
0903300DHA	Support to FACA Advisory Board Activities	6,451	2,060	2,037	-4,391	-68.1%	-23	-1.1%
	Subtotal Consolidated Health Support	2,027,851	1,337,067	1,541,122	-690,784	-34.1%	204,055	15.3%
<u>Information Technology/Information Management</u>								
0807744DHA	Theater Medical Information Program Joint (TMIP-J)	80,207	90,218	0	10,011	12.5%	-90,218	-100.0%
0807746DHA	Joint Operational Medicine Information Systems (JOMIS)	11,836	25,264	118,658	13,428	113.5%	93,394	369.7%
0807758DHA	Cybersecurity	176,354	140,669	140,663	-35,685	0.0%	-6	100.0%
0807759DHA	Military Health System Desktop to Datacenter	450,852	297,055	289,188	-153,797	0.0%	-7,867	100.0%
	Service Medical Information Management/Information Technology (Non-Central)	302,403	130,649	128,073	-171,754	-56.8%	-2,576	-2.0%
0807783DHA	DHP Information Management/Information Technology Support Programs	50,789	35,451	36,236	-15,338	-30.2%	785	2.2%
0807784DHA	Integrated Electronic Health Record	11,673	10,191	10,429	-1,482	-12.7%	238	2.3%
0807787DHA	DoD Healthcare Management Systems	429,731	469,076	529,063	39,345	9.2%	59,987	12.8%
0807788DHA	DoD Medical Information Exchange and Interoperability	53,232	53,590	113,925	358	0.7%	60,335	112.6%
0807793DHA	MHS Tri-Service Information Management/Information Technology	601,630	836,876	867,442	235,246	39.1%	30,566	3.7%
	Subtotal Information Management	2,168,707	2,089,039	2,233,677	-79,668	-3.7%	144,638	6.9%

PB-11 Exhibit
DHP

**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2022 Budget Estimates
Cost of Medical Activities**

Management Activities

0807798DHA	Management Activities	111,301	81,162	81,689	-30,139	-27.1%	527	0.6%
0807704DHA	Defense Health Agency	188,755	249,465	253,449	60,710	32.2%	3,984	1.6%
0807709DHA	TRICARE Management Activity				0	0.0%	0	0.0%
Subtotal Management Activities		300,056	330,627	335,138	30,571	10.2%	4,511	1.4%

Education and Training

0806722DHA	Armed Forces Health Professions Scholarship Program	253,759	6,533	0	-247,226	-97.4%	-6,533	-100.0%
0806721DHA	Uniformed Services University of the Health Sciences	173,890	180,863	177,924	6,973	4.0%	-2,939	-1.6%
0806761DHA	Other Education and Training	319,151	148,289	155,310	-170,862	-53.5%	7,021	4.7%
Subtotal Education and Training		746,800	335,685	333,234	-411,115	-55.1%	-2,451	-0.7%

Base Operations/Communications

0806276DHA	Facilities Restoration and Modernization - CONUS	279,345	296,316	279,253	16,971	6.1%	-17,063	-5.8%
0806376DHA	Facilities Restoration and Modernization - OCONUS	73,172	94,665	96,175	21,493	29.4%	1,510	1.6%
0806278DHA	Facilities Sustainment - CONUS	560,626	480,976	460,751	-79,650	-14.2%	-20,225	-4.2%
0806378DHA	Facilities Sustainment - OCONUS	131,464	138,152	140,903	6,688	5.1%	2,751	2.0%
0807779DHA	Facilities Operations - Health Care - CONUS	493,589	446,318	475,676	-47,271	-9.6%	29,358	6.6%
0807979DHA	Facilities Operations - Health Care - OCONUS	65,987	54,492	56,067	-11,495	-17.4%	1,575	2.9%
0807795DHA	Base Communications - CONUS	47,423	49,614	50,696	2,191	4.6%	1,082	2.2%
0807995DHA	Base Communications - OCONUS	4,802	3,215	3,198	-1,587	-33.0%	-17	-0.5%
0807796DHA	Base Operations - CONUS	290,916	325,414	313,864	34,498	11.9%	-11,550	-3.5%
0807996DHA	Base Operations - OCONUS	4,117	23,792	24,183	19,675	477.9%	391	1.6%
0807754DHA	Pollution Prevention	394	292	298	-102	-25.9%	6	2.1%
0807756DHA	Environmental Compliance	18,563	19,432	18,078	869	4.7%	-1,354	-7.0%
0807790DHA	Visual Information Systems	5,320	7,532	7,723	2,212	41.6%	191	2.5%
Subtotal Base Operations/Communications		1,975,718	1,940,210	1,926,865	-35,508	-1.8%	-13,345	-0.7%
Subtotal DHP Operation and Maintenance		32,963,908	31,114,416	34,182,719	-1,849,492	-5.6%	3,068,303	9.9%

Procurement (Program Elements 0807720DHA & 0807721DHA)

	Dental Equipment	362	376	0	14	100.0%	-376	-100.0%
	Food Service, Preventive Medicine, and Pharmacy Equipment	3,929	4,029	13,270	100	2.5%	9,241	229.4%
	Medical Information System Equipment	14,527	8,401	8,570	-6,126	-42.2%	169	2.0%
	Medical Patient Care Administrative Equipment	6,898	7,036	3,020	138	2.0%	-4,016	-57.1%
	Medical/Surgical Equipment	23,952	24,622	41,584	670	2.8%	16,962	68.9%
	Other Equipment	25,619	31,386	30,522	5,767	22.5%	-864	-2.8%
	Pathology/Lab Equipment	51,484	22,256	10,292	-29,228	-56.8%	-11,964	-53.8%
	Radiographic Equipment	147,487	140,444	164,034	-7,043	-4.8%	23,590	16.8%

Procurement (Program Elements 0807746DHA)

	Joint Operational Medicine Information System	0	2,620	0	2,620	0.0%	-2,620	0.0%
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Procurement (Program Elements 0807759DHA)

	Data to Desktop Center	73,010	70,872	72,302	-2,138	0.0%	1,430	100.0%
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Procurement (Program Elements 0807787DHA)

	DoD Healthcare Management System Modernization	129,091	232,327	435,414	103,236	80.0%	203,087	87.4%
Subtotal Procurement		476,359	544,369	779,008	68,010	14.3%	234,639	43.1%

**Defense Health Program
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Cost of Medical Activities**

Research, Development, Test and Evaluation

0601101DHA	In-House Laboratory Independent Research (ILIR)	4,013	0	0	-4,013	-100.0%	0	0.0%
0601117DHA	Basic Operational Medical Research Sciences	17,408	8,913	9,091	-8,495	-48.8%	178	2.0%
0602115DHA	Applied Biomedical Technology	175,032	72,573	74,024	-102,459	-58.5%	1,451	2.0%
0602787DHA	Medical Technology (AFRRI)	1,383	1,411	1,439	28	2.0%	28	2.0%
0603002DHA	Medical Advanced Technology (AFRRI)	332	352	359	20	6.0%	7	2.0%
0603115DHA	Medical Technology Development	2,097,085	1,994,150	235,197	-102,935	-4.9%	-1,758,953	-88.2%
0604110DHA	Medical Products Support and Advanced Concept Development	1,174,955	147,331	142,252	-1,027,624	-87.5%	-5,079	-3.4%
0605013DHA	Information Technology Development	23,780	16,344	10,866	-7,436	-31.3%	-5,478	-33.5%
0605023DHA	Integrated Electronic Health Record (iEHR)	0	0	0	0	0.0%	0	0.0%
0605025DHA	Theater Medical Information Program - Joint (TMIP-J)	0	0	0	0	0.0%	0	0.0%
0605026DHA	DoD Healthcare Management System Modernization (DHMSM)	14,478	18,336	15,751	3,858	26.6%	-2,585	-14.1%
0605039DHA	DoD Medical Information Exchange and Interoperability (DMIX)	0	0	0	0	0.0%	0	0.0%
0605045DHA	Joint Operational Medicine Information System (JOMIS)	41,902	46,214	52,948	4,312	10.3%	6,734	14.6%
0605145DHA	Medical Products and Support Systems Development	21,589	21,068	21,489	-521	-2.4%	421	2.0%
0605502DHA	Small Business Innovative Research (SBIR) Program	0	0	0	0	0.0%	0	0.0%
0606105DHA	Medical Program-Wide Activities	69,219	48,672	49,645	-20,547	-29.7%	973	2.0%
0607100DHA	Medical Products and Capabilities Enhancement Activities	16,819	17,215	17,619	396	2.4%	404	2.3%
0608045DHA	Software & Digital Technology Pilot Program	0	0	0	0	0.0%	0	0.0%
	Subtotal RDT&E	3,657,995	2,392,579	630,680	-1,265,416	-34.6%	-1,761,899	-73.6%
	Total Defense Health Program	37,098,262	34,051,364	35,592,407	-3,046,898	-8.9%	1,541,043	4.3%

Medicare Eligible Accrual Fund Receipts

Direct Care	1,853,500	2,003,300	2,072,900	149,800	8.1%	69,600	3.5%	
Private Sector Care	8,165,266	8,807,614	9,306,573	642,348	7.9%	498,959	5.7%	
Military Personnel Accounts	551,300	563,800	578,600	12,500	2.3%	14,800	2.6%	
	Total Medicare Eligible Accrual Fund	10,570,066	11,374,714	11,958,073	804,648	7.6%	583,359	5.1%

Research, Development, Test & Evaluation By Program Title

Congressionally Directed Programs	1,573,822	1,783,900	0	210,078	13.3%	-1,783,900	-100.0%	
DHA Central Information Technology Development	20,198	16,344	10,866	-3,854	-19.1%	-5,478	-33.5%	
Service Information Technology Development	3,582	0	0	-3,582	-100.0%	0	0.0%	
Medical Technology Development	515,566	143,264	155,043	-372,302	-72.2%	11,779	8.2%	
Biomedical Technology	15,735	4,215	4,299	-11,520	-73.2%	84	2.0%	
Armed Forces Radiobiology Research Institute (AFRRI)	1,383	1,411	1,439	28	2.0%	28	2.0%	
In-House Laboratory Independent Research (ILIR)	4,013	0	0	-4,013	-100.0%	0	0.0%	
Medical Advanced Technology (AFRRI)	332	352	359	20	6.0%	7	2.0%	
Medical Products Support and Advanced Concept Development	1,040,900	4,080	4,162	-1,036,820	-99.6%	82	0.0%	
Medical Products and Support Systems Development	935	0	0	-935	-100.0%	0	0.0%	
Medical Program-Wide Activities	67,219	48,672	49,645	-18,547	-27.6%	973	2.0%	
DoD Healthcare Management System Modernization (DHMSM)	38,256	18,336	15,751	-19,920	-52.1%	-2,585	-14.1%	
Joint Operational Medicine Information System (JOMIS)	59,902	46,214	52,948	-13,688	-22.9%	6,734	14.6%	
GDF Medical Research Enhancement	316,152	325,791	336,168	9,639	3.0%	10,377	3.2%	
Software & Digital Technology Pilot Program (JOMIS & TMIP - J)	0	0	0	0	0.0%	0	100.0%	
	Total Research, Development, Test and Evaluation	3,657,995	2,392,579	630,680	-1,265,416	-34.6%	-1,761,899	-73.6%

1/ FY 2020 Actuals includes Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 (P.L. 116-94) \$347.535 million, Coronavirus Aid, Relief, and Economic Security Act (P.L.116-136) \$3.466 billion, Fisher House \$10.000M and excludes funds to VA for Lovell FHCC and the Joint Incentive Fund (\$141.865 million), CSI of -490.425M for O&M; +1,573.822M for RDT&E, -7.965M for Proc

2/ FY 2021 Enacted Amounts includes 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; CSI of -600.235M for O&M, +1,830.114M for RDT&E, and -73.557M for Proc

3/ FY 2022 Requested Amounts includes Direct War funding of 251.948M and \$429.415M for continued COVID-19 Pandemic response

**Defense Health Program
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Fiscal Year (FY) 2022 Budget Estimates
Personnel Summary**

	<u>FY 2020 Actual</u>		<u>FY 2021 Estimate</u>		<u>FY 2022 Estimate</u>		<u>FY 21-22 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>	20,429	21,024	19,870	20,150	20,996	20,433	1,126	283
Officers	8,753	9,020	9,306	9,030	9,544	9,425	238	395
Enlisted	11,676	12,004	10,564	11,120	11,452	11,008	888	-112
<u>Navy Total</u>	24,523	26,209	24,030	24,277	23,532	23,781	-498	-496
Officers /1	7,458	8,121	7,885	7,672	7,901	7,893	16	221
Enlisted	17,065	18,088	16,145	16,605	15,631	15,888	-514	-717
<u>Air Force Total</u>	28,631	28,923	26,417	27,524	27,337	26,878	920	-646
Officers	10,232	10,355	9,318	9,775	9,927	9,623	609	-152
Enlisted	18,399	18,568	17,099	17,749	17,410	17,255	311	-494
<u>Total Active Duty</u>	73,583	76,156	70,317	71,951	71,865	71,092	1,548	-859
Officers	26,443	27,496	26,509	26,477	27,372	26,941	863	464
Enlisted	47,140	48,660	43,808	45,474	44,493	44,151	685	-1,323
/1 Includes one USMC DHP officer strength								
<u>Active Military - Non DHP Medical</u>								
<u>Army Total</u>	19,975	19,972	22,927	21,451	23,296	23,112	369	1,661
Officers	4,136	4,133	5,824	4,980	5,969	5,897	145	917
Enlisted	15,839	15,839	17,103	16,471	17,327	17,215	224	744
<u>Navy Total</u>	12,104	11,855	12,263	12,184	13,156	12,710	893	526
Officers	2,680	2,449	2,600	2,640	2,832	2,716	232	76
Enlisted	9,424	9,407	9,663	9,544	10,324	9,994	661	450
<u>Air Force Total</u>	2,166	2,199	3,094	2,630	3,161	3,128	67	498
Officers	1,027	955	1,378	1,203	1,423	1,401	45	198
Enlisted	1,139	1,245	1,716	1,428	1,738	1,727	22	300
<u>Total Active Duty</u>	34,245	34,026	38,284	36,265	39,613	38,949	1,329	2,684
Officers	7,843	7,536	9,802	8,823	10,224	10,013	422	1,191
Enlisted	26,402	26,490	28,482	27,442	29,389	28,936	907	1,494

**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2022 Budget Estimates
Personnel Summary**

	<u>FY 2020 Actual</u>		<u>FY 2021 Estimate</u>		<u>FY 2022 Estimate</u>		<u>FY 21-22 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>
I. Civilian Personnel - US Direct Hire								
Army	35,249	32,454	31,255	31,066	31,415	31,052	160	-14
Navy	10,705	10,062	9,095	8,848	9,090	8,843	-5	-5
Air Force	6,772	6,033	5,872	4,952	5,872	4,952	0	0
Defense Health Agency	11,503	11,209	9,954	9,938	10,842	10,143	888	205
Total	64,229	59,758	56,176	54,804	57,219	54,990	1,043	186
II. Civilian Personnel - Foreign National Direct Hire								
Army	591	617	480	475	480	475	0	0
Navy	273	273	363	340	363	340	0	0
Air Force	198	199	193	172	193	172	0	0
Defense Health Agency	0	0	0	0	0	0	0	0
Total	1,062	1,089	1,036	987	1,036	987	0	0
III. Civilian Personnel - Foreign National Indirect Hire								
Army	704	758	549	533	550	533	1	0
Navy	472	472	448	430	448	430	0	0
Air Force	248	244	167	161	167	161	0	0
Defense Health Agency	3	3	5	5	4	5	-1	0
Total	1,427	1,477	1,169	1,129	1,169	1,129	0	0
IV. Total Civilian Personnel								
Army	36,544	33,829	32,284	32,074	32,445	32,060	161	-14
Navy	11,450	10,807	9,906	9,618	9,901	9,613	-5	-5
Air Force	7,218	6,476	6,232	5,285	6,232	5,285	0	0
Defense Health Agency	11,506	11,212	9,959	9,943	10,846	10,148	887	205
Total /1	66,718	62,324	58,381	56,920	59,424	57,106	1,043	186
V. Summary Civilian Personnel								
U.S. Direct Hire	64,229	59,758	56,176	54,804	57,219	54,990	1,043	186
Foreign National Direct Hire	1,062	1,089	1,036	987	1,036	987	0	0
Foreign National Indirect Hire	1,427	1,477	1,169	1,129	1,169	1,129	0	0
Total, Civilians /1	66,718	62,324	58,381	56,920	59,424	57,106	1,043	186
/1 Includes reimbursable civilians - memo	600	600	206	201	243	238	37	37

**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2022 Budget Estimates
Personnel Summary**

	<u>FY 2020 Actual</u>		<u>FY 2021 Estimate</u>		<u>FY 2022 Estimate</u>		<u>FY 21-22 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>								
Defense Health Agency Management Headquarters (PE 0807898)								
Military	42	42	47	45	46	47	-1	2
Civilian	238	254	239	239	240	240	1	1
Army Management Headquarters (PE 0807798)								
Military	0	69	0	0	0	0	0	0
Civilian	7	151	0	0	0	0	0	0
Navy Management Headquarters (PE 0807798)								
Military	0	101	3	2	8	6	5	4
Civilian	169	166	111	108	111	108	0	0
Air Force Management Headquarters (PE 0807798)								
Military	182	261	7	95	1	4	-6	-91
Civilian	7	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) 2022 Budget Estimates
Medical Workload data - DHP Summary**

	FY 2020 Actuals*	FY 2021 Estimate*	FY 2022 Estimate*	FY 2020-2021 Change	FY 2021-2022 Change
Population - Eligible Beneficiaries, CONUS					
Active Duty **	1,475,005	1,481,244	1,480,979	6,239	-266
Active Duty Family Members	1,843,900	1,855,146	1,858,420	11,246	3,274
Retirees	1,013,131	1,009,581	1,006,617	-3,550	-2,964
Family Members of Retirees	<u>2,456,272</u>	<u>2,451,526</u>	<u>2,447,742</u>	<u>-4,746</u>	<u>-3,784</u>
Subtotal Eligible	6,788,308	6,797,498	6,793,757	9,190	-3,741
Medicare Eligible Beneficiaries ***	<u>2,414,609</u>	<u>2,437,430</u>	<u>2,460,609</u>	<u>22,821</u>	<u>23,178</u>
Total Average Eligible Beneficiaries	9,202,917	9,234,928	9,254,366	32,011	19,437
Population - Eligible Beneficiaries, OCONUS					
Active Duty **	163,611	163,972	163,625	361	-347
Active Duty Family Members	129,039	129,359	129,293	320	-66
Retirees	21,965	21,865	21,775	-100	-91
Family Members of Retirees	<u>56,580</u>	<u>56,483</u>	<u>56,405</u>	<u>-97</u>	<u>-78</u>
Subtotal Eligible	371,195	371,679	371,098	484	-581
Medicare Eligible Beneficiaries	<u>41,223</u>	<u>41,571</u>	<u>41,927</u>	<u>348</u>	<u>356</u>
Total Average Eligible Beneficiaries	412,418	413,250	413,025	832	-225
Population - Eligible Beneficiaries, Worldwide					
Active Duty **	1,638,616	1,645,217	1,644,604	6,601	-613
Active Duty Family Members	1,972,939	1,984,505	1,987,713	11,566	3,208
Retirees	1,035,096	1,031,446	1,028,391	-3,650	-3,055
Family Members of Retirees	<u>2,512,852</u>	<u>2,508,009</u>	<u>2,504,147</u>	<u>-4,843</u>	<u>-3,862</u>
Subtotal Eligible	7,159,503	7,169,177	7,164,855	9,674	-4,322
Medicare Eligible Beneficiaries:					
Active Duty Family Members	4,723	4,736	4,738	13	2
Guard/Reserve Family Members	1,597	1,624	1,645	27	21
Eligible Retirees	1,186,370	1,200,405	1,214,243	14,035	13,837
Eligible Family Members of Retirees ****	768,593	777,534	786,385	8,941	8,851
Survivors	492,422	492,575	493,399	153	824
Others	<u>2,127</u>	<u>2,127</u>	<u>2,127</u>	<u>0</u>	<u>0</u>
Total Medicare Eligible Beneficiaries	2,455,832	2,479,001	2,502,536	23,169	23,534
Total Average Eligible Beneficiaries	9,615,335	9,648,178	9,667,391	32,843	19,213

1. (*) FY 2020-2022 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 defined as MERHCF beneficiaries: 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 defined as MERHCF beneficiaries: Family Members of Retirees, Inactive Guard/Reserves, and Inactive Guard/Reserve Family Members.
5. Numbers may not sum to totals due to rounding.
6. USFHP enrollees who are also Medicare Eligible are shown in Eligible Beneficiaries, not under Medicare Eligible Beneficiaries.

**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2022 Budget Estimates
Medical Workload data - DHP Summary**

	<u>FY 2020</u> <u>Actuals*</u>	<u>FY 2021</u> <u>Estimate*</u>	<u>FY 2022</u> <u>Estimate*</u>	<u>FY 2020-2021</u> <u>Change</u>	<u>FY 2021-2022</u> <u>Change</u>
Enrollees - Direct Care					
TRICARE Region - East	1,628,600	1,635,160	1,634,551	6,560	-609
TRICARE Region - West	741,840	744,828	744,551	2,988	-277
TRICARE Region - Europe	122,430	122,923	122,877	493	-46
TRICARE Region - Pacific	131,450	131,979	131,930	529	-49
TRICARE Region - Latin America	2,533	2,543	2,542	10	-1
Alaska	52,698	52,910	52,891	212	-20
Sub-Total CONUS Regions	2,423,138	2,432,899	2,431,993	9,761	-906
Sub-Total OCONUS Regions	256,413	257,446	257,350	1,033	-96
Total Direct Care Enrollees	2,679,551	2,690,345	2,689,343	10,794	-1,002

Source: Service Medical Departments Business Plans

Enrollees are only TRICARE PRIME Enrollees enrolled to a military treatment facility.

Excludes "Plus" empaneled and other TRICARE space available users. Also excludes MHS Genesis Sites due to unavailability of reliable data at this time.

Effective January 1, 2018, TRICARE North and South Regions combined to form TRICARE East in accordance with the 2017 National Defense Authorization Act.

	<u>FY 2020</u> <u>Actuals*</u>	<u>FY 2021</u> <u>Estimate*</u>	<u>FY 2022</u> <u>Estimate*</u>	<u>FY 2020-2021</u> <u>Change</u>	<u>FY 2021-2022</u> <u>Change</u>
Prime Enrollees - Managed Care Support Contract*					
TRICARE Region - East (old North and South Regions)	945,818	932,287	931,480	-13,531	-807
TRICARE Region - West	380,518	375,449	375,353	-5,069	-96
Total MCS Contracts	1,326,336	1,307,736	1,306,833	-18,600	-903
TRICARE Select Enrollees					
TRICARE Region - East (old North and South Regions)	1,444,309	1,413,760	1,409,148	-30,549	-4,612
TRICARE Region - West	591,001	578,840	577,225	-12,161	-1,615
Total Select	2,035,310	1,992,600	1,986,373	-42,710	-6,227
TRICARE Non-Enrolled					
TRICARE Region - East (old North and South Regions)	133,264	131,082	131,054	-2,182	-28
TRICARE Region - West	61,299	60,200	60,168	-1,099	-32
Total Non-Enrolled	194,563	191,282	191,222	-3,281	-60
TRICARE Region - Overseas - Europe, Pacific, Latin America	417,416	420,016	420,259	2,600	243
Total MCSC, Select and TRICARE Overseas	3,779,062	3,720,352	3,713,465	-58,710	-6,887

1. Prime enrollment, Select and Non-Enrolled exclude TRICARE for Life beneficiaries paid by MERHCF. Managed Care Forecasting and Analysis System (MCFAS) is the source for Civilian Prime, Overseas, Select enrollment and Non-Enrolled future year estimates. Source for MCSC enrollees is M2 (DEERS). FY 2021 and FY 2022 estimates exclude OCO, and is estimated at 1% of eligible population.

2. Overseas enrollee counts include Prime, Prime Remote and Select beneficiaries enrolled under TOP contract. Counts for Select enrollees begin in March FY 2020.

**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2022 Budget Estimates
Medical Workload data - DHP Summary**

Infrastructure	FY 2020 Actuals*	FY 2021 Estimate*	FY 2022 Estimate*	FY 2020-2021 Change	FY 2021-2022 Change
Inpatient Facilities	53	49	49	-4	0
Medical Clinics	497	465	465	-32	0
Dental Clinics	192	192	192	0	0
Veterinary Clinics	250	0	0	-250	0

1. Infrastructure reporting includes Army Embedded Health Clinics and exclude Air Force Line clinics to more accurately reflect those Defense Health Program funded activities generating direct care workload.
2. Explanation of changes in Inpatient Facilities: The decrease from FY 2020 to FY 2021 results from 4 inpatient facility-to-medical clinic conversions at AHC in Vicenza, Italy, AF-C 366th MED SQ at Mountain Home Air Force Base, AF-ASU-31st MEDGRP at Aviano Air Force Base, and Kimbrough Ambulatory Care Center at Fort Meade. There are no projected changes from FY 2021-FY 2022.
3. Explanation of changes in Medical Clinics: The decrease from FY 2020 to FY 2021 (-32) is due to inpatient facility-to-medical clinic conversions (+4); activation of medical clinics (+4); deactivation of AF-COCOM at MacDill Air Force Base (-1); realignment of occupational health clinics to Service Military Department (-18); realignment of public health clinics to the Service Military Departments (-21). There are no projected changes from FY 2021-FY 2022.
4. Explanation of changes in Dental Clinics: There are no projected changes from FY 2020-FY 2022.
5. Explanation of changes in Veterinary Clinics: All 250 Veterinary Facilities are scheduled to move to Military Department of the Army as the DoD Executive Agent for Veterinary Services. There are no projected changes from FY 2021-FY 2022.

Direct Care System Workload (from M2 and Business Planning Tool)	FY 2020 Actuals*	FY 2021 Estimate*	FY 2022 Estimate*	FY 2020-2021 Change	FY 2021-2022 Change
Inpatient Admissions, Non-Weighted (SIDR Dispositions-All)	138,779	123,667	125,443	-15,112	1,777
Inpatient Admissions, Weighted (MS-DRG RWPs, Non Mental Health)	102,803	91,608	92,924	-11,195	1,316
Inpatient Admissions, Occupied Bed Days (Mental Health Only)	69,337	61,786	62,674	-7,551	888
Average Length of Stay (ALL Bed Days/All Dispositions)	2.88	2.88	2.88	0	0.00
Ambulatory Visits, Non-Weighted (Encounters, CAPER)	31,168,225	27,774,134	28,173,117	-3,394,091	398,983
Ambulatory Visits, Weighted (Adj Provider Aggregate RVUs, CAPER)	56,101,441	49,992,225	50,710,377	-6,109,215	718,151
Ambulatory Procedures, Weighted (Aggregate Weight APCs, CAPER)	7,012,417	6,248,793	6,338,559	-763,623	89,766
Number of Outpatient Pharmacy Prescriptions "Scripts"	22,499,853	24,453,830	25,878,189	1,953,977	1,424,359

1. Data source is M2 and performance plans.
2. Workload excludes Tricare for Life (TFL) patients.
3. FY 2021 - FY 2022 projections assumes resiliency and reduced impacts of COVID-19.

Dental Workload (Dental Weighted Values (DWVs)(from Components)	FY 2020 Actuals*	FY 2021 Estimate*	FY 2022 Estimate*	FY 2020-2021 Change	FY 2021-2022 Change
CONUS	7,096,151	6,578,979	7,352,599	-517,172	773,620
OCONUS	1,414,953	1,283,355	1,449,838	-131,598	166,484
Total DWVs	8,511,104	7,862,334	8,802,437	-648,770	940,104
OCONUS					
Active Duty	6,580,091	6,100,530	6,817,889	-479,561	717,359
Non-Active Duty	516,060	478,449	534,710	-37,611	56,261
Total CONUS	7,096,151	6,578,979	7,352,599	-517,172	773,620
OCONUS					
Active Duty	1,067,641	968,345	1,093,964	-99,296	125,619
Non-Active Duty	347,312	315,010	355,875	-32,302	40,865
Total OCONUS	1,414,953	1,283,355	1,449,838	-131,598	166,484

1. DWV Workload data excludes MHS Genesis sites due to unavailability of reliable data at this time.
2. FY 2021-2022 Estimates are based upon performance plan projections and assumes resiliency and reduced impacts of COVID-19.

**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2022 Budget Estimates
Medical Workload data - DHP Summary**

Private Sector Workload

General Notes:

1. All data excludes MERHCF and Dual Eligibles (TDEF).
2. Prime enrollment, Select and Non-Enrolled exclude TRICARE for Life beneficiaries paid by MERHCF. Managed Care forecasting and Analysis System (MCFAS) is the source for Civilian Prime, Overseas, Select enrollment and Non-Enrolled future year estimates. Source for MCSC enrollees is M2 (DEERS). FY 2021 and FY 2022 estimates exclude OCO, and is estimated at 1% of eligible population.
3. Overseas enrollee counts include Prime, Prime Remote and Select beneficiaries enrolled under TOP contract. Counts for Select enrollees begin in March FY 2020.
4. Enrollment is to PSC MCS providers and Overseas Program not to the Military Treatment Facilities.

	FY 2020	FY 2021	FY 2022	FY 2020-2021	FY 2021-2022
	<u>Actuals*</u>	<u>Estimate*</u>	<u>Estimate*</u>	<u>Change</u>	<u>Change</u>
Private Sector Care System Workload					
Outpatient-Visits	69,005,132	65,701,683	72,337,650	-3,303,449	6,635,967
Outpatient-Weighted (Relative Value Units, RVUs)	122,662,003	116,789,865	128,585,813	-5,872,138	11,795,948
Inpatient-Admissions	294,637	280,532	308,867	-14,105	28,335
Inpatient-Weighted (Relative Weighted Products, RWPs)	282,503	268,978	296,146	-13,525	27,168
Pharmacy					
Retail					
Number of Scripts (30-day equivalents)	23,591,490	23,571,982	24,284,365	-19,508	712,383
Mail Order					
Number of Scripts (30-day equivalents)	11,505,950	12,106,469	11,424,712	600,519	-681,757
TRICARE Dental Program Enrollment	683,768	686,704	689,652	2,936	2,948
Uniformed Services Family Health Plan					
Enrollees (Non-Medicare eligible, DoD Only)	98,690	99,058	99,428	368	370

Workload Notes:

1. All FY 2020 PSC workload includes healthcare delivered to OCO beneficiaries.
2. FY 2020 Pharmacy scripts workload increased due to reduced access to Direct Care MTF Pharmacy facilities due to COVID-19 response.
3. FY 2021 to FY 2022 Pharmacy scripts workload estimates assume resiliency and reduced impacts of COVID-19.
4. FY 2021 - FY 2022 PSC workload projections excludes OCO. Estimates assume resiliency and reduced impacts of COVID-19.
5. Dental enrollment projections for FY 2021 and FY 2022 based on the rate of change from FY 2019 to FY 2020. FY 2021 - FY 2022 projections assumes resiliency and reduced impacts of COVID-19.
6. USFHP enrollment projections FY 2021 and FY 2022 based on the rate of change from FY 2019 to FY 2020.

**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2022 Budget Estimates
Advisory and Assistance Services**

Appropriation: Operation & Maintenance

	FY 2020	FY 2021	FY 2022
	<u>Actual</u>	<u>Enacted</u>	<u>Estimate</u>
I. Management & Professional Support Services			
FFRDC Work	1,861	1,193	896
Non-FFRDC Work	734,489	322,394	303,789
Subtotal	736,350	323,587	304,685
II. Studies, Analyses & Evaluation			
FFRDC Work	48,547	6,007	6,007
Non-FFRDC Work	104,924	23,173	22,256
Subtotal	153,471	29,180	28,263
III. Engineering & Technical Services			
FFRDC Work			
Non-FFRDC Work	81,895	5,316	5,003
Subtotal	81,895	5,316	5,003
Total	971,716	358,083	337,951

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**Defense Health Program
Operation and Maintenance, Defense-Wide Fiscal Year
(FY) 2022 Budget Estimates
Summary of Funds Budgeted for Environmental Projects**

	FY 2020	FY 2021	FY 2022
OPR & MAINT			
Active			
<u>Domestic</u>			
Compliance			
<u>Air</u>			
Stationary and Mobile Sources	0.031	0.021	0.021
<u>Compliance Cross-Cutting Programs</u>			
Compliance Education and Training	1.357	2.272	2.082
Multi-Program Management	1.278	0.888	0.875
Total Compliance Cross-Cutting Programs	2.635	3.160	2.958
<u>Compliance manpower</u>			
Compliance Manpower	4.339	4.521	3.050
<u>Compliance Other</u>			
Miscellaneous Compliance Activities	1.892	1.283	1.302
<u>Compliance Related Cleanup</u>			
Other Compliance-Related Assessment and Cleanup	0.000	0.000	0.000
<u>Planning</u>			
Environmental Impact Analysis	0.084	0.080	0.080
<u>Storage and Disposal</u>			
Hazardous Waste (RCRA - C)	3.813	4.543	4.856
Solid Waste (RCRA – D)	2.091	2.028	1.932
USTs (RCRA – I)	0.000	0.000	0.000
Total Storage and Disposal	5.904	6.571	6.788
<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) 2022 Budget Estimates
Summary of Funds Budgeted for Environmental Projects**

	FY 2020	FY 2021	FY 2022
OPR & MAINT			
Active (Continued)			
<u>Domestic (Continued)</u>			
Compliance (Continued)			
<u>Water</u>			
Safe Drinking Water	1.138	1.356	1.427
Spill Prevention and Response/ASTs	0.035	0.020	0.019
Stormwater	0.000	0.000	0.000
Wastewater	0.035	0.025	0.025
Total Water	1.208	1.401	1.471
Total Compliance	16.098	17.042	15.674
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	0.394	0.292	0.298
Total Pollution Prevention	0.394	0.292	0.298
Total Domestic	16.492	17.334	15.972

**Defense Health Program
Operation and Maintenance, Defense-Wide Fiscal Year
(FY) 2022 Budget Estimates
Summary of Funds Budgeted for Environmental Projects**

	FY 2020	FY 2021	FY 2022
OPR & MAINT			
Active			
<u>Foreign</u>			
Compliance			
<u>Air</u>			
Stationary and Mobile Sources	0.004	0.003	0.002
<u>Compliance Cross-Cutting Programs</u>			
Compliance Education and Training	0.022	0.146	0.150
Multi-Program Management	0.155	0.108	0.107
Total Compliance Cross-Cutting Programs	0.177	0.255	0.257
<u>Compliance manpower</u>			
Compliance Manpower	0.552	0.532	0.526
<u>Compliance Other</u>			
Miscellaneous Compliance Activities	0.039	0.025	0.024
<u>Planning</u>			
Environmental Impact Analysis	0.000	0.000	0.000
<u>Storage and Disposal</u>			
Hazardous Waste (RCRA - C)	0.606	0.564	0.572
Solid Waste (RCRA – D)	0.587	0.542	0.536
USTs (RCRA – I)	0.000	0.000	0.000
Total Storage and Disposal	1.193	1.106	1.108
<u>Toxic Substances</u>			
EPCRA Reporting (TRI and Tier I&II)	0.000	0.000	0.000
<u>Water</u>			
Safe Drinking Water	0.500	0.469	0.487
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	2.465	2.390	2.404

**Defense Health Program
 Operation and Maintenance, Defense-Wide Fiscal Year
 (FY) 2022 Budget Estimates
 Summary of Funds Budgeted for Environmental Projects**

	FY 2020	FY 2021	FY 2022
OPR & MAINT			
Active (Summary)			
Environmental Activity Cost Type Totals			
Compliance	18.563	19.432	18.078
Pollution Prevention	0.394	0.292	0.298
Conservation	0.000	0.000	0.000
Total	18.957	19.724	18.376
Location Totals			
Domestic	16.492	17.334	15.972
Foreign	2.465	2.390	2.404
Total	18.957	19.724	18.376
 DHA TOTALS			
Environmental Activity Cost Type Totals			
Compliance	18.563	19.432	18.078
Pollution Prevention	0.394	0.292	0.298
Conservation	0.000	0.000	0.000
Total	18.957	19.724	18.376
Location Totals			
Domestic	16.492	17.334	15.972
Foreign	2.465	2.390	2.404
Total	18.957	19.724	18.376

**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2022 Budget Estimates
Major DoD Headquarters Activities**

Category/ Organization Appropriation	FY 2020 Actuals				FY 2021 Request				FY 2022 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	182	571	753	78,700	10	347	357	53,802	9	348	357	56,109
DHP, 0807898 O&M, DHP	42		42		47		47		46		46	
Total	224	571	795	78,700	57	347	404	53,802	55	348	403	56,109

Please Note: 108 FTEs from the Navy should have been transferred into 0807704 in 20PB as with the rest of the HQ Realignment from the Services to DHA. Clean up action is expected 23PB

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**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2022 Budget Estimates
Procurement Program**

Appropriation Procurement (\$ M)

Date: May 2021

<u>Line</u> <u>No.</u>	<u>Item</u> <u>Nomenclature</u>	FY 2020 <u>Actual</u>	FY 2021 <u>Base</u>	FY 2021 <u>OCO</u>	FY 2021 <u>Total</u> <u>Enacted</u>	FY 2022 <u>Total Request</u>
1	Items greater than \$250,000 each:					
	Medical Equipment - Replacement/Modernization	255.774	215.618	0.000	215.618	250.366
	Medical Equipment - New Facility Outfitting	18.484	22.932	0.000	22.932	20.926
	Joint Operational Medicine Information System	0.000	2.620	0.000	2.620	0.000
	Military Health System - Desktop to Datacenter	73.010	70.872	0.000	70.872	72.302
	Information Technology Development and Sustainment - DoD Healthcare Management System Modernization	129.091	232.327	0.000	232.327	435.414

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.

**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2022 Budget Estimates
Procurement Program**

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.

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) 2022 Budget Estimates
Procurement Budget Item Justification**

BUDGET ITEM JUSTIFICATION SHEET

DATE: May 2021

APPROPRIATION / BUDGET ACTIVITY : 97*0130

P-1 ITEM NOMENCLATURE: Replacement/Modernization

	FY 2020 Actual	FY 2021 Enacted	FY 2022 Total Request
Quantity			
Total Cost (\$ M)	255.774	215.618	250.366
Dental Equipment	0.362	0.376	0.000
Food Ser, Preventive Med, Pharmacy Equip	3.585	3.724	12.907
Medical Information System Equipment	14.527	8.401	8.570
Medical Patient Care Administrative Equip	6.898	7.036	3.020
Medical/Surgical Equipment	22.237	23.098	39.771
Other Equipment	15.130	15.556	18.043
Pathology/Lab Equipment	51.063	21.883	9.848
Radiographic Equipment	141.972	135.544	158.207

REMARKS

The most significant medical equipment investments will be in the radiographic, lab, 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.

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.

**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2022 Budget Estimates
Procurement Budget Item Justification**

BUDGET ITEM JUSTIFICATION SHEET

DATE: May 2021

APPROPRIATION / BUDGET ACTIVITY : 97*0130

P-1 ITEM NOMENCLATURE: New Facility Outfitting

	FY 2020 Actual	FY 2021 Enacted	FY 2022 Total Request
Quantity			
Total Cost (\$ M)	18.484	22.932	20.926
Dental Equipment	0.000	0.000	0.000
Food Ser, Preventive Med, Pharmacy Equip	0.344	0.305	0.363
Medical Information System Equipment	0.000	0.000	0.000
Medical Patient Care Administrative Equip	0.000	0.000	0.000
Medical/Surgical Equipment	1.715	1.524	1.813
Other Equipment	10.489	15.830	12.479
Pathology/Lab Equipment	0.421	0.373	0.444
Radiographic Equipment	5.515	4.900	5.827

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
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2022 Budget Estimates
Procurement Budget Item Justification**

BUDGET ITEM JUSTIFICATION SHEET

DATE: May 2021

APPROPRIATION / BUDGET ACTIVITY : 97*0130

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

	FY 2020 Actual	FY 2021 Enacted	FY 2022 Total Request
Quantity			
Total Cost (\$ M)	0.000	2.620	0.000
JOMIS	0.000	2.620	0.000

REMARKS

The purpose of the Department of Defense (DoD) Joint Operational Medicine Information Systems (JOMIS) Program is to modernize, deploy, and sustain the DoD's operational medicine information systems using 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. While dependent on the healthcare delivery functionality JOMIS PMO will continue to build and modernize other Operational Medicine capabilities while continuing to support delivery of MHS GENESIS-Theater (MHSG-T) Gold Disk. JOMIS is intended to function in constrained, intermittent, and non-existent communications environments while providing access to authoritative sources of clinical data. The JOMIS Program is declared Joint Interest for capability requirements to be executed under the Joint Capabilities Integration and Development System (JCIDS) and the oversight of the Joint Requirements Oversight Council (JROC).

The goals of the JOMIS Increment 1 Program are to:

- Meet existing and emerging operational medicine requirements in the theater
- Fully leverage MHS GENESIS for medical care in Theater
- Provide two way information flow between garrison and theater environments in support of a longitudinal health record

Anticipated benefits of the JOMIS Increment 1 Program include:

- Delivery of uniform clinical information across both garrison and theater environments through the use of MHS GENESIS EHR
- Enhancements to the clinical care and information captured at all levels of care in tactical environments
- Transmission of critical information to the combatant commander, the evacuation chain for combat and non-combat casualties

P-40 Exhibit
DHP

**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2022 Budget Estimates
Procurement Budget Item Justification**

BUDGET ITEM JUSTIFICATION SHEET

DATE: May 2021

APPROPRIATION / BUDGET ACTIVITY : 97*0130

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

	FY 2020 Actual	FY 2021 Enacted	FY 2022 Total Request
Quantity			
Total Cost (\$ M)	73,010.000	70.872	72.302
MHS D2D	73,010.000	70.872	72.302

REMARKS

The MHS Desktop to Datacenter D2D 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. 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 access information between medical facilities; (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. Resources will also encompass: Circuits, Network Service Operations Center (NSOC), MESOC Regional Services, Video Network Center (VNC), Lifecycle Management (Asset Management Support Services - AMSS &, Enterprise Software Management – ESM), Performance Planning Management (PPM), Boundary Services and Server Sustainment.

**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2022 Budget Estimates
Procurement Budget Item Justification**

BUDGET ITEM JUSTIFICATION SHEET

DATE: May 2021

APPROPRIATION / BUDGET ACTIVITY : 97*0130

P-1 ITEM NOMENCLATURE: Information Technology
Development and Sustainment - DoD Healthcare
Management System Modernization (DHMSM)

	FY 2020	FY 2021	FY 2022
	Actual	Enacted	Total Request
Quantity			
Total Cost (\$ M)	129.091	232.327	435.414
DHMSM	129.091	232.327	435.414

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- 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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**Defense Health Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2022 Budget Estimates
RDT&E Programs**

Appropriation: 0130D RDT&E, Defense Health Program

Date: May 2021

Program			Budget	FY 2020	FY 2021	FY 2022	FY 2022
R-1 Line Element			Activity	Actuals ¹	Enacted	Base	Total Estimate
<u>Item No</u>	<u>Number</u>	<u>Item</u>					
1	0601101	In-House Laboratory Independent Research (ILIR)	2	4.013	0.000	0.000	0.000
2	0601117	Basic Operational Medical Research Sciences	2	17.408	8.913	9.091	9.091
3	0602115	Applied Biomedical Technology	2	175.032	72.573	74.024	74.024
4	0602787	Medical Technology	2	1.383	1.411	1.439	1.439
5	0603002	Medical Advanced Technology	2	0.345	0.352	0.359	0.359
6	0603115	Medical Technology Development	2	2,097.072	1,994.150	235.197	235.197
7	0604110	Medical Products Support and Advanced Concept Development	2	1,174.955	147.331	142.252	142.252
8	0605013	Information Technology Development Information Technology Development - DoD Healthcare	2	23.780	16.344	10.866	10.866
9	0605026	Management System Modernization (DHMSM)	2	14.478	18.336	15.751	15.751
10	0605045	Joint Operational Medicine Information System (JOMIS)	2	41.902	46.214	52.948	52.948
11	0605145	Medical Products and Support Systems Development	2	21.589	21.068	21.489	21.489
12	0606105	Medical Program-Wide Activities	2	69.219	48.672	49.645	49.645
13	0607100	Medical Products and Capabilities Enhancement Activities	2	16.819	17.215	17.619	17.619
Total Budget Activity 2				3,657.995	2,392.579	630.680	630.680

Notes:

1. FY 2020 actuals includes congressional additions, reductions, and statutory reductions for FFRDC/SBIR/STTR.

DHP
R-1 Exhibit

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Exhibit R-2, RDT&E Budget Item Justification: PB 2022 Defense Health Agency **Date:** May 2021

Appropriation/Budget Activity 0130: <i>Defense Health Program I BA 2: RDT&E</i>	R-1 Program Element (Number/Name) PE 0601101DHA / <i>In-House Laboratory Independent Research (ILIR)</i>
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COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
Total Program Element	23.972	4.013	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
010A: <i>CSI - Congressional Special Interests</i>	1.315	0.000	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
240A: <i>Infectious Disease (USUHS)</i>	3.110	0.490	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
240B: <i>Military Operational Medicine (USUHS)</i>	9.348	1.509	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
240C: <i>Combat Casualty Care (USUHS)</i>	9.949	2.014	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
468: <i>Metabolomics, Exposure Biomarkers, and Health Outcomes (USUHS)</i>	0.250	0.000	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

Note

Funds were adjusted to higher priority programs in FY 2021-2025.

A. Mission Description and Budget Item Justification

For the Uniformed Services of the Health Sciences (USUHS), this program element supports basic medical research at the Uniformed Services University of the Health Sciences (USUHS). It facilitates the recruitment and retention of faculty; supports unique research training for military medical students and resident fellows; and allows the University's faculty researchers to collect pilot data towards military relevant medical research projects in order to secure research funds from extramural sources (estimated \$180 million annually). Approximately 48 intramural research projects are active each year, including 18 faculty start-ups. Projects are funded on a peer-reviewed, competitive basis. Results from these studies contribute to the knowledge base intended to enable technical approaches and investment strategies within Defense Science and Technology (S&T) programs. USU 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.

Defense-Wide Review reductions permanently eliminates out-year funding for USU's ILIR program.

The ILIR 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 Combat Casualty Care, Infectious Diseases, Military Operational Medicine, and Chemical, Biological, and Radiologic Defense. The portfolio of research projects will vary annually because this research is investigator-initiated. Examples of typical research efforts are detailed in R-2a.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2022 Defense Health Agency	Date: May 2021
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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 0601101DHA I <i>In-House Laboratory Independent Research (ILIR)</i>
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B. Program Change Summary (\$ in Millions)	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Previous President's Budget	4.013	0.000	0.000	-	0.000
Current President's Budget	4.013	0.000	0.000	-	0.000
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	-	-			

Change Summary Explanation

FY 2021: Programmed effort and funding transferred to other higher priority programs.

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency **Date:** May 2021

Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0601101DHA / <i>In-House Laboratory Independent Research (ILIR)</i>	Project (Number/Name) 010A / <i>CSI - Congressional Special Interests</i>
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COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
010A: <i>CSI - Congressional Special Interests</i>	1.315	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

Because of the CSI annual structure, out-year funding is not programmed.

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

N/A

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 2022 Defense Health Agency **Date:** May 2021

Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0601101DHA / <i>In-House Laboratory Independent Research (ILIR)</i>	Project (Number/Name) 240A / <i>Infectious Disease (USUHS)</i>
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COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
240A: <i>Infectious Disease (USUHS)</i>	3.110	0.490	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 Uniformed Services of the Health Sciences (USUHS), this program element supports basic medical research at the Uniformed Services University of the Health Sciences (USUHS). It facilitates the recruitment and retention of faculty; supports unique research training for military medical students and resident fellows; and allows the University's faculty researchers to collect pilot data towards military relevant medical research projects in order to secure research funds from extramural sources (estimated \$180 million annually).

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

	FY 2020	FY 2021	FY 2022
Title: Infectious Disease	0.490	-	-
Description: For FY20 only, Immunology and molecular biology of bacterial, viral and parasitic disease threats to military operations. These threats include Bartonella bacilliformis, Clostridium difficile, Escherichia coli and their Shiga toxins, Henipaviruses (Hendra & Nipah), Cedar Virus, Hepatitis A, Helicobacter pylori, HIV, HTLV-1, Leishmaniasis, Litomosoides sigmodontis, Malaria, Neisseria gonorrhoeae, Shigella spp., Streptococcus, and Methicillin-resistant Staphylococcus aureus (MRSA).			
The pre-pandemic Defense-Wide Review reductions permanently eliminates USU's infectious disease intramural research capability			
Accomplishments/Planned Programs Subtotals	0.490	-	-

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 2022 Defense Health Agency **Date:** May 2021

Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0601101DHA / <i>In-House Laboratory Independent Research (ILIR)</i>	Project (Number/Name) 240B / <i>Military Operational Medicine (USUHS)</i>
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COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
240B: <i>Military Operational Medicine (USUHS)</i>	9.348	1.509	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 Uniformed Services of the Health Sciences (USUHS), this program element supports basic medical research at the Uniformed Services University of the Health Sciences (USUHS). It facilitates the recruitment and retention of faculty; supports unique research training for military medical students and resident fellows; and allows the University's faculty researchers to collect pilot data towards military relevant medical research projects in order to secure research funds from extramural sources (estimated \$180 million annually).

Defense-Wide Review reductions permanently eliminates out-year funding for this program

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

	FY 2020	FY 2021	FY 2022
Title: Military Operational Medicine	1.509	-	-
Description: For FY20 only, Sustainment of individual performance; mapping and managing deployment and operational stressors; cognitive enhancement; use of dietary and nutritional supplements and military and medical training readiness.			
Defense-Wide Review reductions permanently eliminates out-year funding for this program.			
Accomplishments/Planned Programs Subtotals	1.509	-	-

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

N/A

Remarks

D. Acquisition Strategy

N/A

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency **Date:** May 2021

Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0601101DHA / <i>In-House Laboratory Independent Research (ILIR)</i>	Project (Number/Name) 240C / <i>Combat Casualty Care (USUHS)</i>
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COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
240C: <i>Combat Casualty Care (USUHS)</i>	9.949	2.014	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 Uniformed Services of the Health Sciences (USUHS), this program element supports basic medical research at the Uniformed Services University of the Health Sciences (USUHS). It facilitates the recruitment and retention of faculty; supports unique research training for military medical students and resident fellows; and allows the University's faculty researchers to collect pilot data towards military relevant medical research projects in order to secure research funds from extramural sources (estimated \$180 million annually).

Defense-Wide Review reductions permanently eliminates out-year funding for this program.

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

	FY 2020	FY 2021	FY 2022
Title: Combat Casualty Care	2.014	-	-
Description: For FY20 only, Regenerative medicine, rehabilitation, neurological, limb loss, pain management, readiness, resilience.			
Defense-Wide Review reductions permanently eliminates out-year funding for this program.			
Accomplishments/Planned Programs Subtotals	2.014	-	-

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 2022 Defense Health Agency **Date:** May 2021

Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0601101DHA / <i>In-House Laboratory Independent Research (ILIR)</i>	Project (Number/Name) 468 / <i>Metabolomics, Exposure Biomarkers, and Health Outcomes (USUHS)</i>
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COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
468: <i>Metabolomics, Exposure Biomarkers, and Health Outcomes (USUHS)</i>	0.250	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 Uniformed Services of the Health Sciences (USUHS), this program element supports basic medical research at the Uniformed Services University of the Health Sciences (USUHS). It facilitates the recruitment and retention of faculty; supports unique research training for military medical students and resident fellows; and allows the University's faculty researchers to collect pilot data towards military relevant medical research projects in order to secure research funds from extramural sources (estimated \$180 million annually). Approximately 48 intramural research projects are active each year, including 18 faculty start-ups. Projects are funded on a peer-reviewed, competitive basis. Results from these studies contribute to the knowledge base intended to enable technical approaches and investment strategies within Defense Science and Technology (S&T) programs. USU 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.

The ILIR 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 Combat Casualty Care, Infectious Diseases, Military Operational Medicine, and Chemical, Biological, and Radiologic Defense. The portfolio of research projects will vary annually because this research is investigator-initiated. Examples of typical research efforts are detailed in R-2a.

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

N/A

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 2022 Defense Health Agency **Date:** May 2021

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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
Total Program Element	52.190	17.408	8.913	9.091	-	9.091	0.000	0.000	0.000	0.000	Continuing	Continuing
100A: <i>CSI - Congressional Special Interests</i>	9.331	0.000	0.000	0.000	-	0.000	-	-	-	-	Continuing	Continuing
371: <i>GDF - Basic Operational Medical Research Science</i>	42.859	8.556	0.000	0.000	-	0.000	-	-	-	-	Continuing	Continuing
371A: <i>GDF - BOMRS (Combat Casualty Care)</i>	0.000	8.852	1.304	1.328	-	1.328	-	-	-	-	Continuing	Continuing
371B: <i>GDF - BOMRS (Military Operational Medicine)</i>	0.000	0.000	5.498	5.609	-	5.609	-	-	-	-	Continuing	Continuing
371E: <i>GDF - BOMRS (Military Infectious Disease)</i>	0.000	0.000	2.111	2.154	-	2.154	-	-	-	-	Continuing	Continuing

Note

n/a

A. Mission Description and Budget Item Justification

Guidance for Development of the Force-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 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 Quadrennial Defense Review, the National Research Action Plan for Improving Access to Mental Health Services for Veterans, Service Members, and Military Families, the National Strategy for Combating Antibiotic Resistance, and the National Strategy for Biosurveillance.

Research will support efforts such as the Precision Medicine Initiative which seeks to increase the use of big data and interdisciplinary approaches to establish a fundamental understanding of military disease and injury to advance health status assessment, diagnosis, and treatment tailored to individual Service members and beneficiaries, research focused on protection against emerging infectious disease threats, the advancement of state of the art regenerative medicine manufacturing technologies consistent with the National Strategic Plan for Advanced Manufacturing, the advancement of global health engagement and capitalization of complementary research and technology capabilities, improving deployment military occupational and environmental exposure monitoring, and the strengthening of the scientific basis for decision-making in patient safety and quality performance in the Military Health System. The program also supports the Interagency Strategic Plan for Research and Development of Blood Products and Related Technologies for Trauma Care and Emergency Preparedness. 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, the Department of Health and Human Services, and the Department of Homeland Security. Funds in this PE are for basic research that promises to

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Exhibit R-2, RDT&E Budget Item Justification: PB 2022 Defense Health Agency	Date: May 2021
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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 0601117DHA I <i>Basic Operational Medical Research Sciences</i>
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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.

In FY 2016, Congressional Special Interest (CSI) funds were provided for Core Research Funding. Because of the CSI annual structure, out-year funding is not programmed.

B. Program Change Summary (\$ in Millions)	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022 Base</u>	<u>FY 2022 OCO</u>	<u>FY 2022 Total</u>
Previous President's Budget	17.408	8.913	9.091	-	9.091
Current President's Budget	17.408	8.913	9.091	-	9.091
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	-	-			

Change Summary Explanation

N/a in accordance to FY22 PB

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency **Date:** May 2021

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>CSI - Congressional Special Interests</i>
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COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
100A: <i>CSI - Congressional Special Interests</i>	9.331	0.000	0.000	0.000	-	0.000	-	-	-	-	Continuing	Continuing

A. Mission Description and Budget Item Justification

Congressional program increase: Restore Core Research Funding Reduction

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

	FY 2020	FY 2021	FY 2022
Title: CSI - Restoral	0.000	-	-
Description: CSI Restoral for directed research in 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.			
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 2022 Defense Health Agency										Date: May 2021		
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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
371: <i>GDF - Basic Operational Medical Research Science</i>	42.859	8.556	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 Quadrennial Defense Review, 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 managed by the Joint Program Committees (JPCs) in the following areas: 1- Military Infectious Diseases basic research develops protection and treatment products for military relevant infectious diseases. 2- Military Operational Medicine basic research focuses on the development of medical countermeasures against operational stressors, prevention of physical and psychological injuries during training and operations, and maximizing the health, performance and fitness of Service members. 3- Combat Casualty Care basic research focuses 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 2020	FY 2021	FY 2022
Title: Project 371 GDF – Basic Operational Medical Research Sciences	8.556	-	-
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	8.556	-	-

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 2022 Defense Health Agency **Date:** May 2021

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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
371A: <i>GDF - BOMRS (Combat Casualty Care)</i>	0.000	8.852	1.304	1.328	-	1.328	-	-	-	-	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 as stated in the Quadrennial Defense Review, and the National Research Action Plan for Improving Access to Mental Health Services for Veterans, Service members, and Military Families.

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

	FY 2020	FY 2021	FY 2022
Title: Joint Battlefield Healthcare (Formerly Combat Casualty Care)	8.852	1.304	1.328
Description: Joint Battlefield Healthcare activities are focused on developing and understanding of acute and long-term trauma-associated pathophysiology mechanisms to include advanced hemostatic and resuscitative approaches to prolonged field care, enroute care, wound healing and recovery, and neurotrauma.			
FY 2021 Plans: Joint Battlefield Healthcare activities are focused on developing and understanding of acute and long-term trauma-associated pathophysiology mechanisms to include advanced hemostatic and resuscitative approaches to prolonged field care, enroute care, wound healing and recovery, and neurotrauma.			
FY 2022 Plans: Conduct Joint Battlefield Healthcare basic research activities focused on 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. Will continue Joint Battlefield Healthcare activities are focused on developing and understanding of acute and long-term trauma-associated pathophysiology mechanisms to include advanced hemostatic and resuscitative approaches to prolonged field care, enroute care, wound healing and recovery, and neurotrauma.			
FY 2021 to FY 2022 Increase/Decrease Statement: Funding change reflects planned lifecycle of this effort. Increase due to inflation.			
Accomplishments/Planned Programs Subtotals	8.852	1.304	1.328

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

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
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>

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 2022 Defense Health Agency **Date:** May 2021

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>
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COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
371B: <i>GDF - BOMRS (Military Operational Medicine)</i>	0.000	0.000	5.498	5.609	-	5.609	-	-	-	-	Continuing	Continuing

A. Mission Description and Budget Item Justification

Conduct scientific studies and experimentation directed toward increasing fundamental knowledge and understanding to support the development of medical countermeasures against combat stressors, prevention of physical and psychological injuries and maximizing the health, performance and fitness of service members during training and from point of injury through role of care four.

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

	FY 2020	FY 2021	FY 2022
Title: Military Health and Recovery (Formerly Military Operational Medicine)	0.000	5.498	5.609
<p>Description: Efforts include injury prevention and recovery, optimized cognition and fatigue management, physiological 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; performance nutrition and weight balance; operational systems toxicology for environmental health hazards; and, fatigue, cognitive health and performance.</p> <p>FY 2021 Plans: Efforts include injury prevention and recovery, optimized cognition and fatigue management, physiological 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; performance nutrition and weight balance; operational systems toxicology for environmental health hazards; and, fatigue, cognitive health and performance.</p> <p>FY 2022 Plans: Discover and identify new chemical compounds for further characterization and optimization as potential drug leads against emerging infectious diseases (EID). Discover and identify new antigens (a substance which induces an immune response in the body), virulence factors (molecules produced by microorganisms that help them attach, evade host responses and allow spread) and adjuvants (a substance which enhances the body's immune response to an antigen) that will lead to the development of effective EID countermeasures, develop approaches for countermeasures that achieve protective effectiveness and identify correlates of protection (measurable signs of immunity) across genetically diverse species.</p> <p>Will continue efforts include injury prevention and recovery, optimized cognition and fatigue management, physiological health and resilience, and performance in extreme environments. Activities will continue to focus on: injury prevention and recovery related to</p>			

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
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 2020	FY 2021	FY 2022
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. <i>FY 2021 to FY 2022 Increase/Decrease Statement:</i> Increase is due to inflation.			
Accomplishments/Planned Programs Subtotals	0.000	5.498	5.609

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 2022 Defense Health Agency **Date:** May 2021

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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
371E: <i>GDF - BOMRS (Military Infectious Disease)</i>	0.000	0.000	2.111	2.154	-	2.154	-	-	-	-	Continuing	Continuing

A. Mission Description and Budget Item Justification

Basic research focused on the development of products for the prevention and treatment of military relevant infectious diseases.

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

	FY 2020	FY 2021	FY 2022
Title: Military Infectious Disease	0.000	2.111	2.154
Description: Military infectious diseases activities continue to support studies in bacterial diseases for the prevention and treatment of infections with multidrug-resistant (MDR) bacterial pathogens. In addition, to responding to emerging infectious diseases and acute respiratory diseases.			
FY 2021 Plans: Military infectious diseases activities continue to support studies in bacterial diseases for the prevention and treatment of infections with multidrug-resistant (MDR) bacterial pathogens. In addition, to responding to emerging infectious diseases and acute respiratory diseases.			
FY 2022 Plans: Will continue Military infectious diseases activities in bacterial diseases for the prevention and treatment of infections with multidrug-resistant (MDR) bacterial pathogens. In addition, to responding to emerging infectious diseases and acute respiratory diseases.			
FY 2021 to FY 2022 Increase/Decrease Statement: Increase due to inflation.			
Accomplishments/Planned Programs Subtotals	0.000	2.111	2.154

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

N/A

Remarks

n/a

D. Acquisition Strategy

N/A

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Exhibit R-2, RDT&E Budget Item Justification: PB 2022 Defense Health Agency **Date:** May 2021

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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COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
Total Program Element	596.717	175.032	72.573	74.024	-	74.024	0.000	0.000	0.000	0.000	Continuing	Continuing
200A: <i>Congressional Special Interests</i>	186.116	90.914	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	-	-
246A: <i>Combating Antibiotic Resistant Bacteria (CARB) - WRAIR Discovery and Wound Program (Army)</i>	9.924	1.900	0.000	0.000	-	0.000	-	-	-	-	Continuing	Continuing
306B: <i>Advanced Diagnostics & Therapeutics Research & Development (AF)</i>	19.397	0.716	0.151	0.000	-	0.000	-	-	-	-	Continuing	Continuing
306C: <i>Core Adv Diagnostics & Epigenomics Applied Research (AF)</i>	1.728	0.000	0.000	0.000	-	0.000	-	-	-	-	Continuing	Continuing
306D: <i>Biomedical Impact and Readiness Optimization of Air & Space Operations (AF)</i>	1.728	3.265	4.064	4.299	-	4.299	-	-	-	-	Continuing	Continuing
447A: <i>Military HIV Research Program (Army)</i>	47.463	9.435	0.000	0.000	-	0.000	-	-	-	-	Continuing	Continuing
372: <i>GDF - Applied Biomedical Technology</i>	330.361	68.802	0.000	0.000	-	0.000	-	-	-	-	Continuing	Continuing
372A: <i>GDF - ABT (Combat Casualty Care)</i>	0.000	0.000	14.855	15.151	-	15.151	-	-	-	-	Continuing	Continuing
372B: <i>GDF - ABT (Military Operational Medicine)</i>	0.000	0.000	26.255	26.779	-	26.779	-	-	-	-	Continuing	Continuing
372C: <i>GDF - ABT (Medical Simulation & Training/Health Informatics)</i>	0.000	0.000	10.611	10.826	-	10.826	-	-	-	-	Continuing	Continuing
372D: <i>GDF - ABT (Clinical and Rehabilitation Medicine)</i>	0.000	0.000	7.064	7.204	-	7.204	-	-	-	-	Continuing	Continuing

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Exhibit R-2, RDT&E Budget Item Justification: PB 2022 Defense Health Agency										Date: May 2021		
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>							
372E: <i>GDF - ABT (Military Infectious Disease)</i>	0.000	0.000	8.607	8.779	-	8.779	-	-	-	-	Continuing	Continuing
372F: <i>GDF - ABT (Radiological Health Effects)</i>	0.000	0.000	0.966	0.986	-	0.986	-	-	-	-	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 Quadrennial Defense Review, the National Research Action Plan for Improving Access to Mental Health Services for Veterans, Service Members, and Military Families, the National Strategy for Combating Antibiotic Resistance, and the National Strategy for Biosurveillance.

Research will support efforts such as the Precision Medicine Initiative which seeks to increase the use of big data and interdisciplinary approaches to establish a fundamental understanding of military disease and injury to advance health status assessment, diagnosis, and treatment tailored to individual Service members and beneficiaries, translational research focused on protection against emerging infectious disease threats, the advancement of state of the art regenerative medicine manufacturing technologies consistent with the National Strategic Plan for Advanced Manufacturing, the advancement of global health engagement and capitalization of complementary research and technology capabilities, improving deployment military occupational and environmental exposure monitoring, and the strengthening of the scientific basis for decision-making in patient safety and quality performance in the Military Health System. The program also supports the Interagency Strategic Plan for Research & Development of Blood Products and Related Technologies for Trauma Care and Emergency Preparedness. 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, the Department of Health and Human Services, and the Department of Homeland Security. 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.

For the Army Medical Command: This PE funds the military HIV research program to refine identification methods for determining genetic diversity of the virus, to conduct preclinical work in laboratory animals including non-human primates to identify candidates for global HIV-1 vaccine, and to evaluate and prepare overseas sites for clinical trials with these vaccine candidates. Funding is also provided to develop strategies to prevent, mitigate, and treat antibiotic resistant bacteria in wounds through the Combating Antibiotic Resistant Bacteria - WRAIR Discovery and Wound Program.

In FY 2016, Congressional Special Interest funds were provided for Traumatic Brain Injury and Psychological Health (TBI/PH) and Core Research Funding. Because of the CSI annual structure, out-year funding is not programmed.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2022 Defense Health Agency **Date:** May 2021

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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B. Program Change Summary (\$ in Millions)	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Previous President's Budget	175.032	72.573	74.024	-	74.024
Current President's Budget	175.032	72.573	74.024	-	74.024
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: 200A: *Congressional Special Interests*

Congressional Add: *PC426 – CSI - Peer Reviewed Traumatic Brian Injury / Psychological Health (TBI/PH) (PE 0602115) (Army)*

Congressional Add: *PC462A – CSI - GDF Restore Core Applied Biomedical Technology (PE 0602115) (GDF)*

Congressional Add Subtotals for Project: 200A

Congressional Add Totals for all Projects

	FY 2020	FY 2021
	58.203	-
	32.711	-
	90.914	-
	90.914	-

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency **Date:** May 2021

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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
200A: <i>Congressional Special Interests</i>	186.116	90.914	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	-	-

A. Mission Description and Budget Item Justification

In FY 2018, 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 2020	FY 2021
<i>Congressional Add:</i> PC426 – CSI - Peer Reviewed Traumatic Brian Injury / Psychological Health (TBI/PH) (PE 0602115) (Army)	58.203	-
<i>FY 2020 Accomplishments:</i> 426 – CSI - Peer Reviewed Traumatic Brian Injury / Psychological Health (TBI/PH) (PE 0602115) (Army)		
<i>Congressional Add:</i> PC462A – CSI - GDF Restore Core Applied Biomedical Technology (PE 0602115) (GDF)	32.711	-
<i>FY 2020 Accomplishments:</i> PC462A – CSI - GDF Restore Core Applied Biomedical Technology (PE 0602115) (GDF)		
Congressional Adds Subtotals	90.914	-

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 2022 Defense Health Agency **Date:** May 2021

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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
246A: <i>Combating Antibiotic Resistant Bacteria (CARB) - WRAIR Discovery and Wound Program (Army)</i>	9.924	1.900	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 2020	FY 2021	FY 2022
Title: Combating Antibiotic Resistant Bacteria (CARB) - WRAIR Discovery and Wound Program (Army)	1.900	-	-
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	1.900	-	-

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 2022 Defense Health Agency **Date:** May 2021

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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
306B: <i>Advanced Diagnostics & Therapeutics Research & Development (AF)</i>	19.397	0.716	0.151	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 2020	FY 2021	FY 2022
Title: Advanced Diagnostics & Therapeutics Research & Development (AF)	0.716	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.			
FY 2021 Plans: Research will continue examining stem cell therapies for peripheral nerve regeneration and repair as well as radiofrequency-induced injuries.			
FY 2021 to FY 2022 Increase/Decrease Statement: Reduced funding due to realignment within Defense Health Program, Research, Development, Test and Evaluation (DHP RDT&E), Program Element (PE) 0602115DHA, Project Codes 306B and 306D reflect deliberate focus on future readiness mission.			
Accomplishments/Planned Programs Subtotals	0.716	0.151	-

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

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
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>

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

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.

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 2022 Defense Health Agency										Date: May 2021		
Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0602115DHA / <i>Applied Biomedical Technology</i>				Project (Number/Name) 306C / <i>Core Adv Diagnostics & Epigenomics Applied Research (AF)</i>			
COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
306C: <i>Core Adv Diagnostics & Epigenomics Applied Research (AF)</i>	1.728	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 perform research in the area of assay development/refinement for diseases of operational significance/ conditions. This will support increased efficiency and efficacy of care across the spectrum of Advanced Diagnostics and Therapeutics requirements in the defined Portfolio Areas. In addition, this project will support research for biosurveillance/occupational health activities and research/development of evidence based therapeutics

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

N/A

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

N/A

Remarks

D. Acquisition Strategy

Interagency Agreements and Interservice Support Agreements with the US Army, US 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 Announcement (BAA) and Intramural calls for proposal are used to award initiatives in this program and 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 2022 Defense Health Agency										Date: May 2021		
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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
306D: <i>Biomedical Impact and Readiness Optimization of Air & Space Operations (AF)</i>	1.728	3.265	4.064	4.299	-	4.299	-	-	-	-	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. Focus areas include Biomedical Impact of Flight and Airman Readiness Optimization.

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

	FY 2020	FY 2021	FY 2022
Title: Biomedical Impact and Readiness Optimization of Air & Space Operations (AF)	3.265	4.064	4.299
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 2021 Plans: Assess relevant biomarkers, chemical, environmental and medical attributes that impact high performing Airmen. Characterize Aircrew physiologic response to aerospace stressors. Understand the exposure-based pathophysiology behind the high-rates of neck and back pain and injury amongst United State Air Force (USAF) pilots. Study effects of enroute care transport exposure on high-incidence rate clinical presentations and patient outcomes.			
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.			
FY 2021 to FY 2022 Increase/Decrease Statement:			

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency	Date: May 2021
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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 2020	FY 2021	FY 2022
Increased funding due to realignment within Defense Health Program, Research, Development, Test and Evaluation (DHP RDT&E), Program Element (PE) 0602115DHA, Project Codes 306B and 306D reflect deliberate focus on future readiness mission.			
Accomplishments/Planned Programs Subtotals	3.265	4.064	4.299

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

N/A

Remarks

Accomplishments: Discovery of microRNA (miRNA) biomarkers for specific injury mechanisms, novel therapeutics that enhance recovery and resiliency, characterizing neurovascular effects of acceleration and altitude exposures, modeling operational impact of Mission Oriented Protective Posture (MOPP) gear on aircrew and medical operations, physiologic-based pharmacokinetic models of multi-contaminant exposures, modeling ocular health and performance risk criteria for aircrew.

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 2022 Defense Health Agency **Date:** May 2021

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>			
COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
447A: <i>Military HIV Research Program (Army)</i>	47.463	9.435	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)

Title: Military HIV Research Program	FY 2020	FY 2021	FY 2022
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.	9.435	-	-
Accomplishments/Planned Programs Subtotals	9.435	-	-

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-2A, RDT&E Project Justification: PB 2022 Defense Health Agency **Date:** May 2021

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>
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COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
<i>372: GDF - Applied Biomedical Technology</i>	330.361	68.802	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- Medical Simulation and Information Sciences applied research is developing informatics-based simulated military medical training. 2- Military Infectious Diseases applied research is developing protection and treatment products for military relevant infectious diseases. 3- Military Operational Medicine applied research goals are to develop medical countermeasures against operational stressors, prevent musculoskeletal, neurosensory, and psychological injuries during training and operations, and to maximize health, performance and fitness of Service members. 4- 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. 5- Radiation Health Effects applied research supports tasks for the development of radiation medical countermeasures. 6- Clinical and Rehabilitative Medicine applied research is focused on efforts to reconstruct, rehabilitate, and provide care for injured Service members.

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

	FY 2020	FY 2021	FY 2022
Title: GDF Applied Biomedical Technology	68.802	-	-
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.			
Accomplishments/Planned Programs Subtotals	68.802	-	-

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

N/A

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 2022 Defense Health Agency **Date:** May 2021

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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
372A: <i>GDF - ABT (Combat Casualty Care)</i>	0.000	0.000	14.855	15.151	-	15.151	-	-	-	-	Continuing	Continuing

A. Mission Description and Budget Item Justification

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. Joint battlefield healthcare applied research is focused on optimizing survivability and recovery in injured Service members across the spectrum of care from point of injury through enroute care and facility care.

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

	FY 2020	FY 2021	FY 2022
Title: Joint Battlefield Healthcare (Formerly Combat Casualty Care)	-	14.855	15.151
Description: Joint Battlefield Healthcare applied research activities are focused on investigating new diagnostic tools and treatments for prolonged battlefield hemorrhage control, novel approaches for evaluation and treatment of neurotrauma, the role of precision medicine for care for wounded, burn and severe trauma treatments and long term care, and clinically relevant devices and processes related to evacuation and enroute care.			
FY 2021 Plans: Joint Battlefield Healthcare applied research activities are focused on investigating new diagnostic tools and treatments for prolonged battlefield hemorrhage control, novel approaches for evaluation and treatment of neurotrauma, the role of precision medicine for care for wounded, burn and severe trauma treatments and long term care, and clinically relevant devices and processes related to evacuation and enroute care.			
FY 2022 Plans: Conduct Joint Battlefield Healthcare 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 2021 to FY 2022 Increase/Decrease Statement: Funding change reflects planned lifecycle of this effort.			
Accomplishments/Planned Programs Subtotals	-	14.855	15.151

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

N/A

Remarks

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
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>

D. Acquisition Strategy
N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency **Date:** May 2021

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>			
COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
372B: <i>GDF - ABT (Military Operational Medicine)</i>	0.000	0.000	26.255	26.779	-	26.779	-	-	-	-	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 countermeasures against operational stressors, or that prevent musculoskeletal, neurosensory, and psychological injuries during training and from point of injury through role of care four.

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

	FY 2020	FY 2021	FY 2022
Title: Military Health and Recovery (Formerly Military Operational Medicine)	-	26.255	26.779
<p>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.</p> <p>FY 2021 Plans: 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.</p> <p>FY 2022 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 for environmental health hazards; protection and performance sustainment in extreme environments; and optimization of psychological health and resilience.</p> <p>FY 2021 to FY 2022 Increase/Decrease Statement:</p>			

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
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 2020	FY 2021	FY 2022
Funding change reflects planned lifecycle of this effort.			
Accomplishments/Planned Programs Subtotals	-	26.255	26.779

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 2022 Defense Health Agency										Date: May 2021		
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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
372C: <i>GDF - ABT (Medical Simulation & Training/Health Informatics)</i>	0.000	0.000	10.611	10.826	-	10.826	-	-	-	-	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 2020	FY 2021	FY 2022
Title: Medical Simulation Technologies (Formerly Medical Simulation Technologies & Training/Health Informatics)	-	10.611	10.826
<p>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.</p> <p>FY 2021 Plans: 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.</p> <p>FY 2022 Plans:</p>			

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
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 2020	FY 2021	FY 2022
<p>Conduct studies, investigations, and non-system specific technology effort focus on prototyping tissue models, technologies that simulate medical condition progress over time, personalized 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, including the brain and all organ systems of the body; 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 -including those anticipated from future weaponry, 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.</p> <p><i>FY 2021 to FY 2022 Increase/Decrease Statement:</i> Funding change reflects planned lifecycle of this effort.</p>			
Accomplishments/Planned Programs Subtotals	-	10.611	10.826

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 2022 Defense Health Agency **Date:** May 2021

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>			
COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
372D: <i>GDF - ABT (Clinical and Rehabilitation Medicine)</i>	0.000	0.000	7.064	7.204	-	7.204	-	-	-	-	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)

	FY 2020	FY 2021	FY 2022
Title: Clinical and Rehabilitation Medicine	-	7.064	7.204
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 2021 Plans: 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: Efforts will continue to focus on neuromusculoskeletal injuries to advance the diagnosis, treatment and rehabilitation outcomes after Service-related injuries; targets for therapies to alleviate acute, chronic, and battlefield pain; 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 2021 to FY 2022 Increase/Decrease Statement: Funding change reflects planned lifecycle of this effort.			
Accomplishments/Planned Programs Subtotals	-	7.064	7.204

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

N/A

Remarks

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
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>

D. Acquisition Strategy
N/A

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency **Date:** May 2021

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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
372E: <i>GDF - ABT (Military Infectious Disease)</i>	0.000	0.000	8.607	8.779	-	8.779	-	-	-	-	Continuing	Continuing

A. Mission Description and Budget Item Justification

Military infectious diseases activities continue to support studies in bacterial diseases research, and will down-select promising efforts for further development.

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

	FY 2020	FY 2021	FY 2022
<p>Title: Military Infectious Disease</p> <p>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.</p> <p>FY 2021 Plans: 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.</p> <p>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.</p> <p>FY 2021 to FY 2022 Increase/Decrease Statement: Funding change reflects planned lifecycle of this effort.</p>	-	8.607	8.779
Accomplishments/Planned Programs Subtotals	-	8.607	8.779

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

N/A

Remarks

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
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>

D. Acquisition Strategy
N/A

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency **Date:** May 2021

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>
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COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
372F: <i>GDF - ABT (Radiological Health Effects)</i>	0.000	0.000	0.966	0.986	-	0.986	-	-	-	-	Continuing	Continuing

A. Mission Description and Budget Item Justification

Support the discovery and development of medical capabilities to counter the threat of harmful radiation exposure. Research will be focused on countermeasures for acute radiation exposure leading toward identification of candidates for pre-exposure prophylaxis.

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

	FY 2020	FY 2021	FY 2022
Title: Radiological Health Effects	-	0.966	0.986
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 2021 Plans: 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 2021 to FY 2022 Increase/Decrease Statement: Funding change reflects planned lifecycle of this effort.			
Accomplishments/Planned Programs Subtotals	-	0.966	0.986

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

N/A

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
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

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2022 Defense Health Agency **Date:** May 2021

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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
Total Program Element	11.918	1.383	1.411	1.439	-	1.439	0.000	0.000	0.000	0.000	Continuing	Continuing
020: <i>CSI - Congressional Special Interests</i>	0.124	0.000	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
241A: <i>Biodosimetry (USUHS)</i>	2.428	0.283	0.289	0.295	-	0.295	-	-	-	-	Continuing	Continuing
241B: <i>Internal Contamination (USUHS)</i>	1.268	0.149	0.152	0.155	-	0.155	-	-	-	-	Continuing	Continuing
241C: <i>Radiation Countermeasures (USUHS)</i>	8.098	0.951	0.970	0.989	-	0.989	-	-	-	-	Continuing	Continuing

A. Mission Description and Budget Item Justification

For the Uniformed Services University of the Health Sciences (USUHS), Armed Forces Radiobiology Research Institute (AFRRI), this program supports developmental research to investigate new approaches that will lead to advancements in biomedical strategies for preventing, treating, assessing and predicting the health effects of human exposure to ionizing radiation. Program objectives focus on preventing or mitigating the health consequences from exposures to ionizing radiation that represent the highest probable threat to U.S. forces in current tactical, humanitarian and counterterrorism mission environments. New protective 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. Advances in assessment, prognostication, and therapy in case of actual or suspected radiation exposures will enhance triage, treatment decisions and risk assessment in operational settings.

B. Program Change Summary (\$ in Millions)	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Previous President's Budget	1.383	1.411	1.439	-	1.439
Current President's Budget	1.383	1.411	1.439	-	1.439
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	-			

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency **Date:** May 2021

Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0602787DHA / Medical Technology (AF RRI)	Project (Number/Name) 020 / CSI - Congressional Special Interests
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COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
020: CSI - Congressional Special Interests	0.124	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 FY15 DHP Congressional Special Interest (CSI) funding is directed toward core research initiatives in Program Element (PE) 0602787 - Medical Technology (AFRRI). Because of the CSI annual structure, out-year funding is not programmed.

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

N/A

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

N/A

Remarks

D. Acquisition Strategy

N/A

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency										Date: May 2021		
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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
241A: <i>Biodosimetry (USUHS)</i>	2.428	0.283	0.289	0.295	-	0.295	-	-	-	-	Continuing	Continuing

A. Mission Description and Budget Item Justification

For the Uniformed Services University of the Health Sciences (USU), Armed Forces Radiobiology Research Institute (AFRRI), this program supports developmental research to investigate new approaches that will lead to advancements in biomedical strategies for preventing, treating, assessing and predicting the health effects of human exposure to ionizing radiation. Program objectives focus on preventing or mitigating the health consequences from exposures to ionizing radiation that represent the highest probable threat to U.S. forces in current tactical, humanitarian and counterterrorism mission environments. New protective 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. Advances in assessment, prognostication, and therapy in case of actual or suspected radiation exposures will enhance triage, treatment decisions and risk assessment in operational settings.

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

	FY 2020	FY 2021	FY 2022
Title: Biodosimetry (USUHS)	0.283	0.289	0.295
Description: Biodosimetry (USU): For the Uniformed Services University of the Health Sciences (USU), the mission and research objectives for biodosimetry are to assess radiation exposure by developing and providing biological and biophysical dosimetry capabilities for acute, protracted, and prior radiation exposures for all relevant military applications.			
FY 2021 Plans: FY 2021 plans continue efforts as outlined in FY 2020 in addition to the following: - Evaluate the use of the hematological algorithms using archived animal and human databases to provide prognostic diagnostic capability of radiation injury assessment. - Compare various PCC endpoints for their utility to predict the fraction of the body exposed to radiation to determine those that could best provide rapid and accurate diagnostic information. - Evaluate utility of long range QPCR (LR-QPCR) to quantitatively measure radiation-induced DNA damage in mammalian cells. - Continue efforts to establish high energy LINAC electron dose-response curve using the lymphocyte metaphase spread dicentric chromosome aberration assay.			
FY 2022 Plans: FY 2022 plans continue efforts as outlined in FY 2021.			
FY 2021 to FY 2022 Increase/Decrease Statement: Pricing adjustment for inflation.			
Accomplishments/Planned Programs Subtotals	0.283	0.289	0.295

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
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>

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 2022 Defense Health Agency **Date:** May 2021

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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
241B: <i>Internal Contamination (USUHS)</i>	1.268	0.149	0.152	0.155	-	0.155	-	-	-	-	Continuing	Continuing

A. Mission Description and Budget Item Justification

Internal Contamination (USU): For the Uniformed Services University of the Health Sciences (USU), 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)

Title: Internal Contamination (USUHS)	FY 2020	FY 2021	FY 2022
Description: Internal Contamination (USU): 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.	0.149	0.152	0.155
FY 2021 Plans: FY 2021 plans continue efforts as outlined in FY 2020 in addition to the following: initiation of feasibility studies of incorporating non-toxic plant-based metal chelators into a dendrimeric structure for use as potential radionuclide decorporation agents.			
FY 2022 Plans: FY2022 plans continue efforts as outlined in FY 2021.			
FY 2021 to FY 2022 Increase/Decrease Statement: Pricing adjustment for inflation.			
Accomplishments/Planned Programs Subtotals	0.149	0.152	0.155

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).

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
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>

D. Acquisition Strategy
N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency **Date:** May 2021

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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COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
241C: Radiation Countermeasures (USUHS)	8.098	0.951	0.970	0.989	-	0.989	-	-	-	-	Continuing	Continuing

A. Mission Description and Budget Item Justification

Radiation Countermeasures (USU): For the Uniformed Services University of the Health Sciences (USU), 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), termed combined injury (CI). Research 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 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.

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

	FY 2020	FY 2021	FY 2022
Title: Radiation Countermeasures (USUHS)	0.951	0.970	0.989
<p>Description: For the Uniformed Services University of the Health Sciences (USU), 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), termed combined injury (CI). Research 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 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.</p> <p>FY 2021 Plans: FY2021 plans continue efforts as outlined in FY2020 in addition to the following: - Further test drug candidates for prophylactic efficacy in a hematopoietic acute radiation syndrome (H-ARS) murine model. Successful candidates will be developed further for dose and time optimization. - Evaluate differential expression of micro-RNAs in C57BL/6 mice (male and female) and minipig long term after radiation. - Determine the DEARE (delayed effects of acute radiation exposure) effects on the gut microbiome compositions and host-microbiome relationship and identify gender differences. - Test the radiation-induced IL-18, IL-18 receptor (IL-18R) and IL-18BP expression and activation in multiple tissues and cells, develop the IL-18 as a radiation biomarker.</p>			

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
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 2020	FY 2021	FY 2022
<ul style="list-style-type: none"> - Identify the mechanisms by which IL-18 signaling induces mouse tissue and cell injury after radiation and IL-18BP's mitigative effects using IL-18 Knockout mice. - Evaluate the effects and mechanism of radiation-induced inflammatory cytokines including IL-18 and IL-33 release and cell mitochondria response. - Evaluate the efficacy of IL-18BP on survival of radiation-induced GI injury using partial body irradiation (PBI). - Determine the dose reduction factor (DRF) of IL-18BP in irradiated mice. - Evaluate the effects and mechanisms of IL-18BP on survival of mouse gastrointestinal systems after lethal doses of TBI. <p><i>FY 2022 Plans:</i> FY 2022 plans continue efforts as outlined in FY 2021.</p> <p><i>FY 2021 to FY 2022 Increase/Decrease Statement:</i> Pricing adjustment for inflation.</p>			
Accomplishments/Planned Programs Subtotals	0.951	0.970	0.989

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

N/A

Remarks

The program element 0602787DHA for AFRR1 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-2, RDT&E Budget Item Justification: PB 2022 Defense Health Agency **Date:** May 2021

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>							
COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
Total Program Element	2.785	0.345	0.352	0.359	-	0.359	-	-	-	-	Continuing	Continuing
030A: <i>CSI - Congressional Special Interests</i>	0.031	0.000	0.000	0.000	-	0.000	-	-	-	-	Continuing	Continuing
242A: <i>Biodosimetry (USUHS)</i>	1.648	0.206	0.210	0.214	-	0.214	-	-	-	-	Continuing	Continuing
242B: <i>Radiation Countermeasures (USUHS)</i>	1.106	0.139	0.142	0.145	-	0.145	-	-	-	-	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), this program supports applied research for advanced development of biomedical strategies to prevent, treat and assess 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 mitigating the health consequences from exposures to ionizing radiation (alone or in combination with other injuries) that represent the highest probable threat to US forces in current tactical, humanitarian and counterterrorism mission environments. Findings from basic and developmental research are integrated into focused advanced technology development studies to produce the following: (1) protective and therapeutic strategies; (2) novel biological markers and delivery platforms for rapid, field-based individual medical assessment; and (3) experimental data needed to build accurate models for predicting casualties from complex injuries involving radiation and other battlefield insults. The AFRRI, because of its multidisciplinary staff and exceptional laboratory and radiation facilities, is uniquely positioned to execute the program as prescribed by its mission.

B. Program Change Summary (\$ in Millions)	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Previous President's Budget	0.345	0.352	0.359	-	0.359
Current President's Budget	0.345	0.352	0.359	-	0.359
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	-	-			

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency **Date:** May 2021

Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603002DHA / Medical Advanced Technology (AFRRI)	Project (Number/Name) 030A / CSI - Congressional Special Interests
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COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
030A: CSI - Congressional Special Interests	0.031	0.000	0.000	0.000	-	0.000	-	-	-	-	Continuing	Continuing

A. Mission Description and Budget Item Justification

Because of the CSI annual structure, out-year funding is not programmed.

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

N/A

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 2022 Defense Health Agency										Date: May 2021		
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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
242A: <i>Biodosimetry (USUHS)</i>	1.648	0.206	0.210	0.214	-	0.214	-	-	-	-	Continuing	Continuing

A. Mission Description and Budget Item Justification

For the Uniformed Services University of the Health Sciences/Armed Forces Radiobiology Research Institute (USU/AFRRI), this program supports applied research for advanced development of biomedical strategies to prevent, treat and assess 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 mitigating the health consequences from exposures to ionizing radiation (alone or in combination with other injuries) that represent the highest probable threat to US forces in current tactical, humanitarian and counterterrorism mission environments. Findings from basic and developmental research are integrated into focused advanced technology development studies to produce the following: (1) protective and therapeutic strategies; (2) novel biological markers and delivery platforms for rapid, field-based individual medical assessment; and (3) experimental data needed to build accurate models for predicting casualties from complex injuries involving radiation and other battlefield insults. The AFRRI, because of its multidisciplinary staff and exceptional laboratory and radiation facilities, is uniquely positioned to execute the program as prescribed by its mission.

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

	FY 2020	FY 2021	FY 2022
Title: Biodosimetry (USUHS)	0.206	0.210	0.214
Description: Biodosimetry (USUHS): For the Uniformed Services University of the Health Sciences (USUHS), this program supports applied research for advanced development of biomedical and biophysical strategies to assess health consequences from exposure to ionizing radiation. It capitalizes on findings under PE 0602787HP, Medical Technology, and from industry and academia to advance novel biological markers and delivery platforms for rapid, field-based individual dose assessment and experimental data needed to build accurate models for predicting casualties from complex injuries involving radiation and other battlefield insults.			
FY 2021 Plans:			
- Continue efforts to transition cytogenetic assay (i.e., DCA) for dose assessment to a clinical practice.			
- Expand the validation of cytogenetic assays for dose assessment using the premature chromosome condensation (PCC) assay as a secondary endpoint for radiation dose and partial-body assessment.			
- Contribute as a lecturer in NATO-sponsored course (Software tools for triage of the acute radiation syndrome: a practical workshop StTARS-2021, Oak Ridge, TN) addressing AFRRI's biodosimetry software tools (BAT, WinFRAT, mFRAT).			
- Establish validation data using animal model system (i.e., baboon) on the use of multiple blood cell-based hematology algorithm to distinguish whether individuals are exposed to < or > 2 Gy radiation.			
- Continue efforts on Air Force LINAC project in analyzing cytogenetic blood lymphocytes samples.			
FY 2022 Plans:			

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603002DHA / <i>Medical Advanced Technology (AFRR)</i>	Project (Number/Name) 242A / <i>Biodosimetry (USUHS)</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2020	FY 2021	FY 2022
FY 2022 plans continue efforts as outlined in FY 2021.			
<i>FY 2021 to FY 2022 Increase/Decrease Statement:</i> Pricing adjustment for inflation.			
Accomplishments/Planned Programs Subtotals	0.206	0.210	0.214

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

N/A

Remarks

The program element 0602787DHA for AFRR 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 2022 Defense Health Agency **Date:** May 2021

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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
242B: Radiation Countermeasures (USUHS)	1.106	0.139	0.142	0.145	-	0.145	-	-	-	-	Continuing	Continuing

A. Mission Description and Budget Item Justification

Radiation Countermeasures (USU): For the Uniformed Services University of the Health Sciences (USU), 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 2020	FY 2021	FY 2022
Title: Radiation Countermeasures (USUHS)	0.139	0.142	0.145
<p>Description: Radiation Countermeasures (USU): For the Uniformed Services University of the Health Sciences (USU), 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>FY 2021 Plans: FY 2021 plans continue efforts as outlined in FY 2020 in addition to the following: - Study energy-genesis in small intestine samples of male and female mice after mixed-field high-LET radiation exposure. - Plan to look into NRF1, NRF2, complexes 1-V profiles, DRP1, Mfn1(mitochondrial remodeling biomarkers), AKT activation, MAPK activation, mdm2, and p53 in ileum samples of male and female mice after mixed-field high-LET N/AFY 2 radiation exposure.</p> <p>FY 2022 Plans: FY 2022 plans continue efforts as outlined in FY2021.</p> <p>FY 2021 to FY 2022 Increase/Decrease Statement:</p>			

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
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 2020	FY 2021	FY 2022
Pricing adjustment for inflation.			
Accomplishments/Planned Programs Subtotals	0.139	0.142	0.145

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

N/A

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Exhibit R-2, RDT&E Budget Item Justification: PB 2022 Defense Health Agency **Date:** May 2021

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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
Total Program Element	9,067.680	2,097.085	1,932.465	235.197	-	235.197	-	-	-	-	Continuing	Continuing
300A: <i>CSI - Congressional Special Interests</i>	7,347.005	1,502.654	1,702.215	0.000	-	0.000	-	-	-	-	-	-
238C: <i>Air & Space Austere Environment Patient Care and Transport (AF)</i>	31.358	8.088	11.250	12.675	-	12.675	-	-	-	-	Continuing	Continuing
284B: <i>Air & Space Physiology, Medicine and Human Performance (AF)</i>	26.343	5.633	10.418	11.122	-	11.122	-	-	-	-	Continuing	Continuing
285A: <i>Operational Medicine Research & Development (Budgeted) (AF)</i>	29.889	5.514	0.232	0.000	-	0.000	-	-	-	-	Continuing	Continuing
307B: <i>Air & Space Force Health Protection (AF)</i>	72.572	9.919	10.046	11.463	-	11.463	-	-	-	-	Continuing	Continuing
308B: <i>Expeditionary Medicine Research & Development (Budgeted) (AF)</i>	24.981	4.737	2.623	0.000	-	0.000	-	-	-	-	Continuing	Continuing
309A: <i>Regenerative Medicine (USUHS)</i>	55.997	10.209	10.413	10.621	-	10.621	-	-	-	-	Continuing	Continuing
378B: <i>CoE-Breast Cancer Center of Excellence (USU)</i>	29.556	10.475	10.685	10.898	-	10.898	-	-	-	-	Continuing	Continuing
379B: <i>CoE-Gynecological Cancer Center of Excellence (USU)</i>	25.837	9.158	9.341	9.528	-	9.528	-	-	-	-	Continuing	Continuing
382B: <i>CoE-Pain Center of Excellence (USUHS)</i>	14.103	3.376	1.945	2.014	-	2.014	-	-	-	-	Continuing	Continuing
383A: <i>CoE-Prostate Cancer Center of Excellence (USUHS)</i>	56.993	8.359	8.526	8.696	-	8.696	-	-	-	-	Continuing	Continuing
431A: <i>Underbody Blast Testing (Army)</i>	59.411	9.200	0.000	0.000	-	0.000	-	-	-	-	-	-

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Exhibit R-2, RDT&E Budget Item Justification: PB 2022 Defense Health Agency										Date: May 2021			
Appropriation/Budget Activity					R-1 Program Element (Number/Name)								
0130: Defense Health Program I BA 2: RDT&E					PE 0603115DHA I Medical Technology Development								
448A: Military HIV Research Program (Army)	38.639	7.877	0.000	0.000	-	0.000	-	-	-	-	Continuing	Continuing	
830A: Deployed Warfighter Protection (Army)	39.819	6.345	0.000	0.000	-	0.000	-	-	-	-	Continuing	Continuing	
478: Applied Proteogenomics Organizational Learning and Outcomes (APOLLO) Consortium (USUHS)	29.003	18.566	18.640	18.724	-	18.724	-	-	-	-	Continuing	Continuing	
479: Framingham Longitudinal Study (USUHS)	9.666	4.920	4.920	4.920	-	4.920	-	-	-	-	Continuing	Continuing	
499: MHS Financial System Acquisition (DHA)	35.580	15.373	1.971	6.011	-	6.011	-	-	-	-	Continuing	Continuing	
381: CoE - Integrative Cardiac Health Care (USUHS)	2.811	3.118	1.680	1.744	-	1.744	-	-	-	-	Continuing	Continuing	
504: WRAIR Vaccine Production Facility Research (Army)	8.000	8.152	0.000	0.000	-	0.000	-	-	-	-	Continuing	Continuing	
506: Health Research for Improved Medical Readiness and Healthcare Delivery (USUHS)	0.000	11.904	11.141	11.385	-	11.385	-	-	-	-	Continuing	Continuing	
507: Brain Injury and Disease Prevention, Treatment and Research (USUHS)	0.000	13.317	13.583	13.855	-	13.855	-	-	-	-	Continuing	Continuing	
508: Psychological Health and Resilience (USUHS)	0.000	7.000	7.140	7.283	-	7.283	-	-	-	-	Continuing	Continuing	
509: Innovative Technologies for Improved Medical Diagnoses, Rehabilitation and Warfighter Readiness (USUHS)	0.000	19.323	13.710	14.104	-	14.104	-	-	-	-	Continuing	Continuing	
373: GDF - Medical Technology Development	1,130.117	78.868	5.000	0.000	-	0.000	-	-	-	-	Continuing	Continuing	
373A: GDF - MTD (Combat Casualty Care)	0.000	0.000	11.168	15.736	-	15.736	-	-	-	-	Continuing	Continuing	

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Exhibit R-2, RDT&E Budget Item Justification: PB 2022 Defense Health Agency										Date: May 2021		
Appropriation/Budget Activity					R-1 Program Element (Number/Name)							
0130: Defense Health Program I BA 2: RDT&E					PE 0603115DHA I Medical Technology Development							
373B: GDF - MTD (Military Operational Medicine)	0.000	0.000	23.255	19.046	-	19.046	-	-	-	-	Continuing	Continuing
373C: GDF - MTD (Medical Simulation & Training/Health Informatics)	0.000	0.000	12.613	13.044	-	13.044	-	-	-	-	Continuing	Continuing
373D: GDF - MTD (Clinical and Rehabilitation Medicine)	0.000	0.000	13.040	14.980	-	14.980	-	-	-	-	Continuing	Continuing
373E: GDF - MTD (Military Infectious Disease)	0.000	0.000	6.409	6.630	-	6.630	-	-	-	-	Continuing	Continuing
373F: GDF - MTD (Radiological Health Effects)	0.000	0.000	0.501	0.518	-	0.518	-	-	-	-	Continuing	Continuing
373G: GDF - MTD (Military Medical Photonics)	0.000	0.000	10.000	10.200	-	10.200	-	-	-	-	Continuing	Continuing
519: CARES Act - H.R. 748, (P.L. 116-136)	-	315.000	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 Quadrennial Defense Review, the National Research Action Plan for Improving Access to Mental Health Services for Veterans, Service Members, and Military Families, the National Strategy for Combating Antibiotic Resistance, and the National Strategy for Biosurveillance.

Research will support efforts such as the Precision Medicine Initiative which seeks to increase the use of big data and interdisciplinary approaches to establish a fundamental understanding of military disease and injury to advance health status assessment, diagnosis, and treatment tailored to individual Service members and beneficiaries, translational research focused on protection against emerging infectious disease threats, the advancement of state of the art regenerative medicine manufacturing technologies consistent with the National Strategic Plan for Advanced Manufacturing, the advancement of global health engagement and capitalization of complementary research and technology capabilities, improving deployment military occupational and environmental exposure monitoring, and the strengthening of the scientific basis for decision-making in patient safety and quality performance in the Military Health System. The program also supports the Interagency Strategic Plan for Research & Development of Blood Products and Related Technologies for Trauma Care and Emergency Preparedness. 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, the Department of Health and Human Services, and the Department of Homeland Security. 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.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2022 Defense Health Agency Date: May 2021

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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For the Army Medical Command -

The Underbody Blast (UBB) Testing medical research project provides funds to establish a scientific and statistical basis for evaluating skeletal injuries to vehicle occupants during ground vehicle UBB events. Areas of interest to the Secretary of Defense are medical research that provides an understanding of the human response and tolerance limits and injury mechanisms needed to accurately predict skeletal injuries to ground combat vehicle occupants caused by UBB events. This enhanced understanding will support the establishment of an improved capability to conduct Title 10 Live Fire Test and Evaluation and to make acquisition decisions.

The military human immunodeficiency virus (HIV) research project provides funds to develop candidate HIV vaccines, to assess their safety and effectiveness in human subjects, and to protect military personnel from risks associated with HIV infection.

The Armed Forces Pest Management Board Deployed Warfighter Protection program provides for the development of new or improved protection of military personnel from insects and tick vectors of disease pathogens.

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 (Army) 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 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.

In FY 2017, Congressional Special Interest (CSI) funds were added to support peer-reviewed research programs: Amyotrophic Lateral Sclerosis (ALS), Autism, Bone Marrow Failure Disease, Ovarian Cancer, Multiple Sclerosis, Cancer, Lung Cancer, Orthopedic, Spinal Cord, Vision, Traumatic Brain Injury and Psychological Health (TBI/PH), Breast Cancer, Prostate Cancer, Gulf War Illness, Alcohol and Substance Use Disorders, Medical Research, Alzheimer's, Reconstructive Transplant, Tuberous Sclerosis Complex, Duchenne Muscular Dystrophy, Epilepsy, and Tick-borne diseases. CSI funds were also provided for Joint Warfighter Medical Research, Orthotics and Prosthetics Outcomes, Trauma Clinic Research, HIV/AIDS Program Increase, Global HIV/AIDS Prevention, and Core Research Funding. Because of the CSI annual structure, out-year funding is not programmed.

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

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Exhibit R-2, RDT&E Budget Item Justification: PB 2022 Defense Health Agency	Date: May 2021
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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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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.

B. Program Change Summary (\$ in Millions)	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022 Base</u>	<u>FY 2022 OCO</u>	<u>FY 2022 Total</u>
Previous President's Budget	1,782.072	225.250	235.197	-	235.197
Current President's Budget	2,097.085	1,932.465	235.197	-	235.197
Total Adjustments	315.013	1,707.215	0.000	-	0.000
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	315.000	1,707.215			
• Congressional Directed Transfers	-	-			
• Reprogrammings	0.013	-			
• SBIR/STTR Transfer	-	-			

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Exhibit R-2, RDT&E Budget Item Justification: PB 2022 Defense Health Agency **Date:** May 2021

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 2020	FY 2021
Project: 300A: <i>CSI - Congressional Special Interests</i>		
Congressional Add: 245A - <i>Amyotrophic Lateral Sclerosis (ALS) Research</i>	20.000	40.000
Congressional Add: 293A - <i>Autism Research</i>	15.000	15.000
Congressional Add: 296A - <i>Bone Marrow Failure Disease Research</i>	3.000	7.500
Congressional Add: 310A - <i>Peer-Reviewed Ovarian Cancer Research</i>	35.000	35.000
Congressional Add: 328A - <i>Peer- Reviewed Multiple Sclerosis Research</i>	16.000	20.000
Congressional Add: 335A - <i>Peer-Reviewed Cancer Research</i>	110.000	115.000
Congressional Add: 336A - <i>Peer-Reviewed Lung Cancer Research</i>	14.000	20.000
Congressional Add: 337A - <i>Peer-Reviewed Orthopaedic Research</i>	30.000	30.000
Congressional Add: 338A - <i>Peer-Reviewed Spinal Cord Research</i>	40.000	40.000
Congressional Add: 339A - <i>Peer-Reviewed Vision Research</i>	20.000	20.000
Congressional Add: 352A - <i>Traumatic Brain Injury/Psychological Health Research</i>	106.000	175.000
Congressional Add: 380A - <i>Peer-Reviewed Breast Cancer Research</i>	150.000	150.000
Congressional Add: 390A - <i>Peer-Reviewed Prostate Cancer Research</i>	110.000	110.000
Congressional Add: 392A - <i>Gulf War Illness Peer-Reviewed Research</i>	22.000	22.000
Congressional Add: 396A - <i>Research in Alcohol and Substance Use Disorders</i>	0.000	4.000
Congressional Add: 400A - <i>Peer-Reviewed Medical Research</i>	360.000	370.000
Congressional Add: 417A - <i>Peer-Reviewed Alzheimer Research</i>	15.000	15.000
Congressional Add: 439A - <i>Joint Warfighter Medical Research</i>	30.000	32.000
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	15.000
Congressional Add: 456A - <i>HIV/AIDS Program</i>	15.000	16.000
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>	185.151	221.215
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

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Exhibit R-2, RDT&E Budget Item Justification: PB 2022 Defense Health Agency **Date:** May 2021

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 2020	FY 2021
Congressional Add: 502 - <i>CSI - Peer-Reviewed Kidney Cancer Research (Army)</i>	40.000	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	8.000
Congressional Add: 660A - <i>Tuberous Sclerosis Complex (TSC)</i>	6.000	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>	20.000	30.000
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>	6.000	15.000
Congressional Add: 516 - <i>Peer-Reviewed Rare Cancers Research</i>	7.500	17.500
Congressional Add: 517 - <i>Peer-Reviewed Scleroderma Research</i>	5.000	5.000
Congressional Add: <i>N/a rounding effort</i>	3.003	0.000
Congressional Add Subtotals for Project: 300A	1,502.654	1,702.215
Project: 519: CARES Act - H.R. 748, (P.L. 116-136)		
Congressional Add: <i>CARES Act - H.R. 748, (P.L. 116-136)</i>	315.000	-
Congressional Add Subtotals for Project: 519	315.000	-
Congressional Add Totals for all Projects	1,817.654	1,702.215

Change Summary Explanation

Project 519 was created for CARES Act - H.R. 748, (P.L. 116-136) funding totaling \$315M.

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency **Date:** May 2021

Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / Medical Technology Development	Project (Number/Name) 300A / CSI - Congressional Special Interests
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COST (\$ in Millions)	Prior Years ⁽⁺⁾	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
300A: CSI - Congressional Special Interests	7,347.005	1,502.654	1,702.215	0.000	-	0.000	-	-	-	-	-	-

⁽⁺⁾ The sum of all Prior Years is \$225.250 million less than the represented total due to several projects ending

A. Mission Description and Budget Item Justification

In FY 2018, 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 2020	FY 2021
Congressional Add: 245A - Amyotrophic Lateral Sclerosis (ALS) Research <i>FY 2020 Accomplishments:</i> FY20 Congressional Add <i>FY 2021 Plans:</i> FY21 Congressional Add	20.000	40.000
Congressional Add: 293A - Autism Research <i>FY 2020 Accomplishments:</i> FY20 Congressional Add <i>FY 2021 Plans:</i> FY21 Congressional Add	15.000	15.000
Congressional Add: 296A - Bone Marrow Failure Disease Research <i>FY 2020 Accomplishments:</i> FY20 Congressional Add <i>FY 2021 Plans:</i> FY20 Congressional Add	3.000	7.500
Congressional Add: 310A - Peer-Reviewed Ovarian Cancer Research <i>FY 2020 Accomplishments:</i> FY20 Congressional Add <i>FY 2021 Plans:</i> FY21 Congressional Add	35.000	35.000
Congressional Add: 328A - Peer-Reviewed Multiple Sclerosis Research <i>FY 2020 Accomplishments:</i> FY20 Congressional Add <i>FY 2021 Plans:</i> FY21 Congressional Add	16.000	20.000
Congressional Add: 335A - Peer-Reviewed Cancer Research	110.000	115.000

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
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 2020	FY 2021
FY 2020 Accomplishments: FY20 Congressional Add		
FY 2021 Plans: FY21 Congressional Add		
Congressional Add: 336A - Peer-Reviewed Lung Cancer Research	14.000	20.000
FY 2020 Accomplishments: FY20 Congressional Add		
FY 2021 Plans: FY21 Congressional Add		
Congressional Add: 337A - Peer-Reviewed Orthopaedic Research	30.000	30.000
FY 2020 Accomplishments: FY20 Congressional Add		
FY 2021 Plans: FY21 Congressional Add		
Congressional Add: 338A - Peer-Reviewed Spinal Cord Research	40.000	40.000
FY 2020 Accomplishments: FY20 Congressional Add		
FY 2021 Plans: FY21 Congressional Add		
Congressional Add: 339A - Peer-Reviewed Vision Research	20.000	20.000
FY 2020 Accomplishments: Congressional Add		
FY 2021 Plans: Congressional Add		
Congressional Add: 352A - Traumatic Brain Injury/Psychological Health Research	106.000	175.000
FY 2020 Accomplishments: Congressional Add		
FY 2021 Plans: Congressional Add		
Congressional Add: 380A - Peer-Reviewed Breast Cancer Research	150.000	150.000
FY 2020 Accomplishments: Congressional Add		
FY 2021 Plans: Congressional Add		
Congressional Add: 390A - Peer-Reviewed Prostate Cancer Research	110.000	110.000
FY 2020 Accomplishments: Congressional Add		
FY 2021 Plans: Congressional Add		
Congressional Add: 392A - Gulf War Illness Peer-Reviewed Research	22.000	22.000

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
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 2020	FY 2021
FY 2020 Accomplishments: Congressional Add		
FY 2021 Plans: Congressional Add		
Congressional Add: 396A - Research in Alcohol and Substance Use Disorders	0.000	4.000
FY 2020 Accomplishments: Congressional Add		
FY 2021 Plans: Congressional Add		
Congressional Add: 400A - Peer-Reviewed Medical Research	360.000	370.000
FY 2020 Accomplishments: Congressional Add		
FY 2021 Plans: Congressional Add		
Congressional Add: 417A - Peer-Reviewed Alzheimer Research	15.000	15.000
FY 2020 Accomplishments: Congressional Add		
FY 2021 Plans: Congressional Add		
Congressional Add: 439A - Joint Warfighter Medical Research	30.000	32.000
FY 2020 Accomplishments: Congressional Add		
FY 2021 Plans: Congressional Add		
Congressional Add: 452A - Peer-Reviewed Reconstructive Transplant Research	12.000	12.000
FY 2020 Accomplishments: Congressional Add		
FY 2021 Plans: Congressional Add		
Congressional Add: 454A - Orthotics and Prosthetics Outcomes Research	15.000	15.000
FY 2020 Accomplishments: Congressional Add		
FY 2021 Plans: Congressional Add		
Congressional Add: 456A - HIV/AIDS Program	15.000	16.000
FY 2020 Accomplishments: Congressional Add		
FY 2021 Plans: Congressional Add		
Congressional Add: 459A - Peer-Reviewed Epilepsy Research	12.000	12.000

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
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 2020	FY 2021
FY 2020 Accomplishments: Congressional Add		
FY 2021 Plans: Congressional Add		
Congressional Add: 463A – Program Increase: Restore Core Research Funding Reduction (GDF)	185.151	221.215
FY 2020 Accomplishments: Congressional Add		
FY 2021 Plans: Congressional Add		
Congressional Add: 495 - Peer-Reviewed Tick-Borne Disease Research	7.000	7.000
FY 2020 Accomplishments: Congressional Add		
FY 2021 Plans: Congressional Add		
Congressional Add: 496 -Trauma Clinical Research Program	10.000	10.000
FY 2020 Accomplishments: Congressional Add		
FY 2021 Plans: Congressional Add		
Congressional Add: 501 - Peer-Reviewed Hearing Restoration Research (Army)	10.000	10.000
FY 2020 Accomplishments: Congressional Add		
FY 2021 Plans: Congressional Add		
Congressional Add: 502 - CSI - Peer-Reviewed Kidney Cancer Research (Army)	40.000	50.000
FY 2020 Accomplishments: Congressional Add		
FY 2021 Plans: Congressional Add		
Congressional Add: 503 - CSI - Peer-Reviewed Lupus Research (Army)	10.000	10.000
FY 2020 Accomplishments: Congressional Add		
FY 2021 Plans: Congressional Add		
Congressional Add: 540A - Global HIV/AIDS Prevention (Navy)	8.000	8.000
FY 2020 Accomplishments: Congressional Add		
FY 2021 Plans: Congressional Add		
Congressional Add: 660A - Tuberous Sclerosis Complex (TSC)	6.000	8.000

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency	Date: May 2021
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Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / Medical Technology Development	Project (Number/Name) 300A / CSI - Congressional Special Interests
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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2020	FY 2021
FY 2020 Accomplishments: Congressional Add		
FY 2021 Plans: Congressional Add		
Congressional Add: 790A - Peer-Reviewed Duchenne Muscular Dystrophy	10.000	10.000
FY 2020 Accomplishments: Congressional Add		
FY 2021 Plans: Congressional Add		
Congressional Add: 512 - Peer-Reviewed Melanoma Research	20.000	30.000
FY 2020 Accomplishments: Congressional Add		
FY 2021 Plans: Congressional Add		
Congressional Add: 513 - Chronic Pain Management	15.000	15.000
FY 2020 Accomplishments: Congressional Add		
FY 2021 Plans: Congressional Add		
Congressional Add: 514 - Combat Readiness Medical Research	10.000	10.000
FY 2020 Accomplishments: Congressional Add		
FY 2021 Plans: Congressional Add		
Congressional Add: 515 - Peer-Reviewed Pancreatic Cancer Research	6.000	15.000
FY 2020 Accomplishments: Congressional Add		
FY 2021 Plans: Congressional Add		
Congressional Add: 516 - Peer-Reviewed Rare Cancers Research	7.500	17.500
FY 2020 Accomplishments: Congressional Add		
FY 2021 Plans: Congressional Add		
Congressional Add: 517 - Peer-Reviewed Scleroderma Research	5.000	5.000
FY 2020 Accomplishments: Congressional Add		
FY 2021 Plans: Congressional Add		
Congressional Add: N/a rounding effort	3.003	0.000

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency	Date: May 2021
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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 2020	FY 2021
<i>FY 2020 Accomplishments:</i> Congressional Add		
<i>FY 2021 Plans:</i> Congressional Add		
Congressional Adds Subtotals	1,502.654	1,702.215

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 2022 Defense Health Agency										Date: May 2021		
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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
238C: Air & Space Austere Environment Patient Care and Transport (AF)	31.358	8.088	11.250	12.675	-	12.675	-	-	-	-	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 2020	FY 2021	FY 2022
Title: Air & Space Austere Environment Patient Care and Transport (AF)	8.088	11.250	12.675
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 2021 Plans: Develop military-relevant models of injury and clinical presentation and evaluate the risks for secondary insult due to transport. Advance therapeutics and novel interventions that mitigate combat casualty care injuries and reduce risks due to transport. Mature technology that reduces size, weight and power, and cold-chain management requirements, and enhances inter-service operability. Model and optimize care provider performance in enroute care operational environments. Continue pursuing the Air Force Medical Service (AFMS) strategic goal A1 to "Transform the Enroute Care System" based on war fighter identified gaps and validated requirements. Analyses will be conducted assessing the critical impact of hypobaria after hemorrhage and resuscitation in a model of hemorrhagic injury.			
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			

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
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 2020	FY 2021	FY 2022
requirements, as well as continue to optimize labor and resource requirements for future medical combat casualty care operations. FY 2021 to FY 2022 Increase/Decrease Statement: Increase is due to inflation.			
Accomplishments/Planned Programs Subtotals	8.088	11.250	12.675

C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	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, an updated spinal immobilization transport capability, and updated guidance for the Validating Flight Surgeon community regarding the use of Cabin Altitude Restriction prescriptions on Strategic Aeromedical Evacuation. Gained insight on the critical impacts of hypobaria on hemorrhage and resuscitation and progressed in developing countermeasures and treatments for muscle injury and hemorrhagic shock in a hypobaric environment. A life trajectory comparison was performed between psychiatric aeromedical evacuation and non-psychiatric aeromedical evacuation patients to enhance enroute care practices and a targeted analysis of steroid-related metabolites was performed as a method to reduce post-traumatic stress disorder.

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 2022 Defense Health Agency										Date: May 2021		
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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
284B: Air & Space Physiology, Medicine and Human Performance (AF)	26.343	5.633	10.418	11.122	-	11.122	-	-	-	-	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 2020	FY 2021	FY 2022
Title: Air & Space Physiology, Medicine and Human Performance (AF)	5.633	10.418	11.122
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 2021 Plans: Continue implementation of the Optimization of Air Force Human Capital research plan focused on medical readiness to support airman mission alignment. Advance understanding of appropriate selection pertaining to new accessions, job placement, injury reduction and retention. Continue assessment and validation of standards across research lines in the areas of vision, psychology, and physiology for high risk and high demand AF career fields, to include those related to unexplained physiological events (UPEs). Develop model to assess and validate performance and risk criteria for individuals within specific career fields.			
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 2021 to FY 2022 Increase/Decrease Statement: Increase is due to inflation			
Accomplishments/Planned Programs Subtotals	5.633	10.418	11.122

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
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>

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

N/A

Remarks

Accomplishments: Successfully delivered Contract Data Requirements List (CDRL) for the Precision-Based Airmen Optimization (PBAO) Basic Performance Resources (BPR) Inventory in Jan 2020 (6 months ahead of schedule). Successfully completed initial tests involving BPR data collection process across vision, psychologic, physiologic, and audio domains. Also, refined and validated high-level tasks with operational subject matter experts in their respective career fields. Lastly, determined the impact of lower extremity stress fracture on the career trajectories of USAF Basic Military Trainees.

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 2022 Defense Health Agency **Date:** May 2021

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>
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COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
285A: <i>Operational Medicine Research & Development (Budgeted) (AF)</i>	29.889	5.514	0.232	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 2020	FY 2021	FY 2022
Title: Operational Medicine Research & Development (Budgeted) (AF)	5.514	0.232	-
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 2021 Plans: The current military separation and retirement practices by health care providers will be investigated, including assessment and communication of diabetes risk to separating or retiring members and counseling regarding how to minimize risk. Continued research includes the development of an exportable Diabetes Self-Management Education (DSME) methodology that can be used throughout the Military Health System (MHS) to support national diabetes education and support standards for patient care.			
FY 2021 to FY 2022 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	5.514	0.232	-

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

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.

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
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>

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 2022 Defense Health Agency **Date:** May 2021

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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
307B: Air & Space Force Health Protection (AF)	72.572	9.919	10.046	11.463	-	11.463	-	-	-	-	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 2020	FY 2021	FY 2022
Title: Air & Space Force Health Protection (AF)	9.919	10.046	11.463
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.			
FY 2021 Plans: To detect Airman relative medical threats and stressors using comprehensive monitoring solutions and specific analyte real-time sensing while establishing framework for data automation. These efforts seek to establish solid ground for the transition of relevant models and sensing technologies for advanced prototyping.			
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.			
FY 2021 to FY 2022 Increase/Decrease Statement: Increase due to inflation			
Accomplishments/Planned Programs Subtotals	9.919	10.046	11.463

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

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
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>

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

Remarks

Accomplishments: Successful decontamination of multiple aircraft in response to COVID-19. Characterization and modeling of airflow on multiple aircraft for optimal cabin air filtering in response to COVID-19. Genetic mutations were evaluated for conferring resistance to infectious diseases; preventive medicine methods were developed for conducting epidemiological queries in training populations; and technologies, therapies, and tools to detect, diagnose, and deter directed energy or radio frequency exposures were evaluated to prevent, preserve, and protect cells.

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 2022 Defense Health Agency **Date:** May 2021

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>
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COST (\$ in Millions)	Prior Years ⁽⁺⁾	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
308B: <i>Expeditionary Medicine Research & Development (Budgeted) (AF)</i>	24.981	4.737	2.623	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 2020	FY 2021	FY 2022
Title: Expeditionary Medicine Research & Development (Budgeted) (AF)	4.737	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.			
FY 2021 Plans: Research will continue to evaluate therapies to treat acute non-compressible torso hemorrhage, including Resuscitative Endovascular Balloon Occlusion (REBOA) and the Abdominal Aortic and Junctional Tourniquet (AAJT), a next generation tourniquet. Work will continue on the development of VentRight, which will allow for portable ventilation monitoring. The Autonomous Selective Organ Perfusion (ASOP) platform will be developed for prolonged field and enroute care applications suitable for life and limb salvage technologies.			
FY 2021 to FY 2022 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	4.737	2.623	-

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

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
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>

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

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 2022 Defense Health Agency **Date:** May 2021

Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / Medical Technology Development	Project (Number/Name) 309A / Regenerative Medicine (USUHS)
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COST (\$ in Millions)	Prior Years ⁽⁺⁾	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
309A: <i>Regenerative Medicine (USUHS)</i>	55.997	10.209	10.413	10.621	-	10.621	-	-	-	-	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 2020	FY 2021	FY 2022
Title: Regenerative Medicine (USUHS)	10.209	10.413	10.621
<p>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.</p> <p>FY 2021 Plans: The Center for Neuroscience and Regenerative Medicine's (CNRM) objectives include: (1) Continue interdisciplinary, collaborative studies that bring together expertise across the Uniformed Services University (USU), the Walter Reed National Military Medical Center (WRNMMC), and the National Institutes of Health (NIH) to perform the highest priority traumatic brain injury (TBI) research, with a particular emphasis in interventional trials in animals and humans, that studies military-related TBI and its comorbidities; (2) Continue operational capability of all Cores to provide efficient research infrastructure with high quality resources and technical expertise; (3) Continued development of the Clinical Trials Unit and expand clinical research capability to increase the number of interventional trials; (4) Define focus areas of next research stage and best funding format for those directions, optimize research teams, and support new research projects pending availability of FY21 funding; (5) Disseminate findings of CNRM basic, translational, and clinical research; (6) Host virtual CNRM Retreat and internal data discussions to foster cross-fertilization of expertise and innovative development across translational and clinical research; (7) Host annual research Symposium to foster interaction among TBI research organizations (postponed due to COVID); (8) Support open data access to completed clinical studies to qualified federal and academic investigators; (9) Provide biofluids specimens for use in approved research protocols within CNRM and to other qualified federal and academic investigators; (10) Partner with other funding agencies and commercial entities to advance translation of CNRM research; (11) Support fellowship program to facilitate training of the next generation of leaders in military-relevant TBI research and clinical care at three sites (USU, NIH, and University of Maryland's</p>			

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
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 2020	FY 2021	FY 2022
School of Medicine) in the Washington D.C. area; (12) Participation in the development of a unified response to the 01OCT18 Deputy Secretary of Defense memo entitled a "Comprehensive Strategy and Action Plan for Warfighter Brain Health"; (13) Utilize Biospecimen Bank of blood specimens linked to magnetic resonance imaging (MRI) and clinical assessment data in longitudinal studies of TBI patients and relevant comparison cohorts; (14) Creation of work flow pipeline for accurate and efficient analysis of neuroimaging data relevant to TBI, including quantitative analysis of microhemorrhages, traumatic meningeal injury, and white matter abnormalities; (15) Utilize multiple animal models involving multiple species for improved analysis of acute and chronic effects of TBI relevant to the warfighter, including blast exposure, repetitive injury, and stress conditions.			
<i>FY 2022 Plans:</i> FY 2022 plans continue efforts as outlined in FY 2021.			
<i>FY 2021 to FY 2022 Increase/Decrease Statement:</i> Price adjustment for inflation.			
Accomplishments/Planned Programs Subtotals	10.209	10.413	10.621

C. Other Program Funding Summary (\$ in Millions)												
<u>Line Item</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u> <u>Base</u>	<u>FY 2022</u> <u>OCO</u>	<u>FY 2022</u> <u>Total</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>	
• BA-1, 0806721HP: <i>Uniformed Services University of the Health Sciences</i>	9.840	10.036	10.236	-	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
N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency										Date: May 2021		
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 (USU)</i>			
COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
378B: <i>CoE-Breast Cancer Center of Excellence (USU)</i>	29.556	10.475	10.685	10.898	-	10.898	-	-	-	-	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 2020	FY 2021	FY 2022
Title: Breast Cancer Center of Excellence	10.475	10.685	10.898
<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>FY 2021 Plans: FY 2021 plans continue efforts as outlined in FY 2020.</p> <p>The Program will complete the following:</p> <p>Objective 1: Identify and consent a minimum of 100 patients (to include patients at high risk for development of breast cancer) annually to the MCCRP 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" USU MCCRP/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>			

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
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 (USU)</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2020	FY 2021	FY 2022
<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 (North Carolina), and Puget Sound (Washington). Acquire through consented protocol acquisitions, over 5,000 specimens annually (neo-plastic 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 USU MCCRPs BC-COE Biorepository as the substrate for all molecular analyses carried out in USU MCCRPs BC-COE labs, as outlined in the USU MCCRPs 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 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 patients groups bearing poor outcomes, who are enriched in the military active-duty military population: young women, and African American 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 life style 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, create 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 2022 Plans: FY 2022 plans continue efforts as outlined in FY 2021.</p> <p>FY 2021 to FY 2022 Increase/Decrease Statement: Pricing adjustment for inflation.</p>			
Accomplishments/Planned Programs Subtotals	10.475	10.685	10.898

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
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 (USU)</i>

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, incorporation into training curriculum throughout the Military Health System and other applicable means.

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency										Date: May 2021		
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 (USU)</i>			
COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
379B: <i>CoE-Gynecological Cancer Center of Excellence (USU)</i>	25.837	9.158	9.341	9.528	-	9.528	-	-	-	-	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)

Title: Gynecological Cancer Center of Excellence	FY 2020	FY 2021	FY 2022
	9.158	9.341	9.528

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
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 (USU)</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2020	FY 2021	FY 2022
<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.</p> <p>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 2021 Plans: Develop novel strategies for prevention, early detection, and precision treatment of gynecologic cancers by identifying molecular alterations in these diseases. Interrogate ovarian and uterine cancer looking at the complex interplay of tumor cells and the surrounding stroma that supports carcinogenesis as well as the molecular landscape of primary versus metastatic disease. These investigations will facilitate development of clinical biomarkers and assays for gynecologic malignancies throughout the spectrum of care and improve early diagnosis and clinical care.</p> <p>FY 2022 Plans:</p>			

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
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 (USU)</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2020	FY 2021	FY 2022
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 to reveal clinically actionable data to improve outcomes. <i>FY 2021 to FY 2022 Increase/Decrease Statement:</i> Pricing Adjustment.			
Accomplishments/Planned Programs Subtotals	9.158	9.341	9.528

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 2022 Defense Health Agency **Date:** May 2021

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)
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COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
382B: CoE-Pain Center of Excellence (USUHS)	14.103	3.376	1.945	2.014	-	2.014	-	-	-	-	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 2020	FY 2021	FY 2022
Title: Pain Center of Excellence (USUHS)	3.376	1.945	2.014
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.			
FY 2021 Plans: FY 2021 Plans continue efforts as outlined in FY 2020. The DVCIPM has developed a 5-year plan for FY20-24 that will focus on further developing the Pain Registry Biobank (PRBioBank) as novel, innovative Institutional Review Board (IRB)-approved registry that combines patient reported outcomes (PASTOR) with blood and tissue samples and other objective measures from participants and Health Services Research and Predictive Modeling. DVCIPM will continue to focus on assimilating complementary and integrative pain management (CIPM), novel analgesics, and interventional pain management. Critical to the continued transformation of DoD pain management, DVCIPM will continue to serve as the MHS's coordinating organization for pain education, clinical policy and knowledge translation.			
FY 2022 Plans: FY 2022 plans continue efforts as outlined in FY 2021.			
FY 2021 to FY 2022 Increase/Decrease Statement: Pricing adjustment for inflation.			
Accomplishments/Planned Programs Subtotals	3.376	1.945	2.014

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
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>

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, incorporation into training curriculum throughout the Military Health System, and other applicable means.

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency										Date: May 2021		
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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
383A: <i>CoE-Prostate Cancer Center of Excellence (USUHS)</i>	56.993	8.359	8.526	8.696	-	8.696	-	-	-	-	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 (USU), 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 (USU, WRNMMC, JPC, NMCS, MAMC, SAMMC, and TAMC).

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

Title: CoE-Prostate Cancer Center of Excellence (USUHS)	FY 2020	FY 2021	FY 2022
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-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.	8.359	8.526	8.696

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
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 2020	FY 2021	FY 2022
<p><i>FY 2021 Plans:</i> Leverage long term assets of DoD patient database and biospecimen bank towards delineation of molecular markers to enhance treatment decisions through precision medicine with emphasis on racially diverse patients in equal access military healthcare system. Define prostate cancer prevention strategies by addressing the role of predisposing conditions, military-specific exposures, and genetic components in prostate cancer onset and progression of service members. Lead discoveries of prostate cancer causing genes for diagnosing, prognosing and targeted therapy of racially diverse DoD prostate cancer patients with indolent and aggressive disease. Utilize advanced informatics and logistic platforms for enhancing the integration of clinical, biospecimen and molecular database towards the development of diagnostic and prognostic tools.</p> <p><i>FY 2022 Plans:</i> FY 2022 plans continue efforts as outlined in FY 2021.</p> <p><i>FY 2021 to FY 2022 Increase/Decrease Statement:</i> Pricing adjustment for inflation.</p>			
Accomplishments/Planned Programs Subtotals	8.359	8.526	8.696

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 2022 Defense Health Agency **Date:** May 2021

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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
431A: Underbody Blast Testing (Army)	59.411	9.200	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)

Title: Underbody Blast Testing	FY 2020	FY 2021	FY 2022
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.	9.200	-	-
Accomplishments/Planned Programs Subtotals	9.200	-	-

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, 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 2022 Defense Health Agency **Date:** May 2021

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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
448A: Military HIV Research Program (Army)	38.639	7.877	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 2020	FY 2021	FY 2022
Title: Military HIV Research Program	7.877	-	-
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	7.877	-	-

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

N/A

Remarks

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
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 2022 Defense Health Agency **Date:** May 2021

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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
830A: <i>Deployed Warfighter Protection (Army)</i>	39.819	6.345	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 2020	FY 2021	FY 2022
Title: Deployed Warfighter Protection	6.345	-	-
Description: The Deployed Warfighter Protection project will develop new or improved protection for ground forces from disease-carrying insects.			
Accomplishments/Planned Programs Subtotals	6.345	-	-

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-2A, RDT&E Project Justification: PB 2022 Defense Health Agency										Date: May 2021		
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>			
COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
478: <i>Applied Proteogenomics Organizational Learning and Outcomes (APOLLO) Consortium (USUHS)</i>	29.003	18.566	18.640	18.724	-	18.724	-	-	-	-	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 USU 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 2020	FY 2021	FY 2022
Title: DoD Cancer Moonshot - Applied Proteogenomics Organizational Learning and Outcomes (APOLLO) Consortium (USUHS)	18.566	18.640	18.724
Description: 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 Diego; Womack AMC; Keesler AFB) and, then, sequencing the entire DNA genome and RNA sequence at USU, while analyzing the entire protein expression profile of these same cancers in MCCRP's Proteomics Laboratory, as well as other affiliated protein laboratories. The vast molecular data that will be derived from these analyses (in			

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
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)

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.

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.

FY 2021 Plans:

FY 2021 Plans continue efforts as outlined in FY 2020.

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 MCCRCP tissue source sites will be utilized which include 10 MTFs and MEDCENS in the MHS. Active duty service members diagnosed with cancer at these locations will be preferentially prioritized for offers of enrollment in APOLLO in order to make sure the DoD is providing state-of-the-art research and clinical translational care opportunities to our active duty force to maintain and sustain the highest level of Readiness.

The program will complete the following tasks:

Task 1: Patients will be recruited and consented for this protocol 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.

FY 2020	FY 2021	FY 2022

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
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 2020	FY 2021	FY 2022
<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 Automated Central Tumor Registry (ACTUR) 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 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 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 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> <p>FY 2022 Plans: FY 2022 plans continue efforts as outlined in FY 2021.</p> <p>FY 2021 to FY 2022 Increase/Decrease Statement: Pricing adjustment for inflation.</p>			
Accomplishments/Planned Programs Subtotals	18.566	18.640	18.724

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 2022 Defense Health Agency										Date: May 2021		
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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
479: Framingham Longitudinal Study (USUHS)	9.666	4.920	4.920	4.920	-	4.920	-	-	-	-	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 USU 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 2020	FY 2021	FY 2022
Title: DoD Cancer Moonshot Program - DoD Framingham Longitudinal Study	4.920	4.920	4.920
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. 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			

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
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)

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 ADSM 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.

Both the APOLLO and Framingham 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 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 2021 Plans:

FY 2021 Plans continue efforts as outlined in FY 2020, including the following tasks:

Task 1: The Department of Defense (DoD) Joint Pathology Center’s (JPC) Automated Central Tumor Registry (ACTUR) will be queried for patients with identified cancer subject.

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.

Task 3: The approximately 150 identified cancer subjects and 150 matched controls, each with up to four longitudinal 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.

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.

FY 2022 Plans:

FY 2022 plans continue efforts as outlined in FY 2021.

FY 2021 to FY 2022 Increase/Decrease Statement:

FY 2020	FY 2021	FY 2022

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
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 2020	FY 2021	FY 2022
Funding remains the same.			
Accomplishments/Planned Programs Subtotals	4.920	4.920	4.920

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 2022 Defense Health Agency **Date:** May 2021

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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
499: MHS Financial System Acquisition (DHA)	35.580	15.373	1.971	6.011	-	6.011	-	-	-	-	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 2020	FY 2021	FY 2022
Title: MHS Financial System Acquisition	15.373	1.971	6.011
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 2021 Plans: Deployment requirements for the Navy go down and shift towards the operation and maintenance. This program may increase in later years pending potential GFEBS deployment to AF and acceleration in existing acquisitions.			
FY 2022 Plans: Begin GFEBS deployment to the Air Force.			
FY 2021 to FY 2022 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 GFEBS deployment to AF and acceleration in existing acquisitions.			
Accomplishments/Planned Programs Subtotals			6.011

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
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 2020</u>	<u>FY 2021</u>	<u>FY 2022</u> <u>Base</u>	<u>FY 2022</u> <u>OCO</u>	<u>FY 2022</u> <u>Total</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• BA 3: <i>PE 0807721</i> <i>Replacement & Modernization</i>	22.611	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 2022 Defense Health Agency **Date:** May 2021

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)
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COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
381: CoE - Integrative Cardiac Health Care (USUHS)	2.811	3.118	1.680	1.744	-	1.744	-	-	-	-	Continuing	Continuing

A. Mission Description and Budget Item Justification

The USU 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 2020	FY 2021	FY 2022
Title: Integrative Cardiac Health	3.118	1.680	1.744
Description: USU 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.			
FY 2021 Plans: FY 2021 Plans continue efforts as outlined in FY 2020. - Complete/continue ongoing projects. - Initiate pivotal randomized clinical trial of 450 Active Duty Service Members for prevention of obesity and cardiovascular outcomes. - Two new registries focused on cardiogenetic care and sudden death in ADSM slated for the FY21.			
FY 2022 Plans: FY 2022 plans continue efforts as outlined in FY 2021.			
FY 2021 to FY 2022 Increase/Decrease Statement: Pricing adjustment for inflation.			
Accomplishments/Planned Programs Subtotals	3.118	1.680	1.744

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

N/A

Remarks

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
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>

D. Acquisition Strategy

Disseminate medical knowledge products resulting from research and development through articles in peer reviewed journals, revised clinical practice guidelines, and training of residents and fellows in the Military Health System

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency										Date: May 2021		
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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
504: WRAIR Vaccine Production Facility Research (Army)	8.000	8.152	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 2020	FY 2021	FY 2022
Title: WRAIR Vaccine Production Facility	8.152	-	-
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	8.152	-	-

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 2022 Defense Health Agency **Date:** May 2021

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)
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COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
506: Health Research for Improved Medical Readiness and Healthcare Delivery (USUHS)	0.000	11.904	11.141	11.385	-	11.385	-	-	-	-	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 2020	FY 2021	FY 2022
Title: Health Research for Improved Medical Readiness and Healthcare Delivery	11.904	11.141	11.385
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.			
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.			
The Precision Medicine Initiative for Military Medical Education and Research’s (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. PRIMER provides standardized genome profiling services, genomic data analysis, and genomic data storage under DoD security and privacy compliance policies, addressing 8 separate DoD requirements across the MHS. PRIMER performs clinical implementation research in the field of genomic medicine to inform policy and clinical practice guidelines for use of genomics in the MHS, while also providing education in the use of genomic medicine to health care providers at all levels of training.			

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
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 2020	FY 2021	FY 2022
<p>The military Women’s Health research program 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 focuses on basic, clinical and translational research.</p> <p>Infectious Disease Clinical Research is 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. It also 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>FY 2021 Plans: Improve the efficacy of military medical engagements with partner nations in achieving military outcomes for global health. Improve readiness of the Join Force to conduct global health engagement activities in support of geographic combatant commands and national security objectives. Improve quality of tools and capabilities available to commanders for conducting international security cooperation and cooperative health security engagements. Enable single collection site of genomic data for DoD Precision Medicine studies to contribute towards population medicine innovation. Utilize supercomputing infrastructure to support clinical activities. Support research projects in the areas of reproductive health, pain, mental health, cardiovascular disease, cancer, human performance and readiness standards, nutrient and energy requirement for servicewomen.</p> <p>FY 2022 Plans: FY 2022 plans continue efforts as outlined in FY 2021.</p> <p>FY 2021 to FY 2022 Increase/Decrease Statement: Price adjusted for inflation.</p>			
Accomplishments/Planned Programs Subtotals	11.904	11.141	11.385

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 2022 Defense Health Agency **Date:** May 2021

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)
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COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
507: Brain Injury and Disease Prevention, Treatment and Research (USUHS)	0.000	13.317	13.583	13.855	-	13.855	-	-	-	-	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)

	FY 2020	FY 2021	FY 2022
Title: Brain Injury and Disease Prevention, Treatment and Research	13.317	13.583	13.855
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 neurodegenerative diseases following repeated TBI. 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, 319,513 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. Part of the progress in this regard is the development of a transgenic rat that overexpresses human tau with the P301S mutation. In addition, new highly sensitive techniques to identify the presence of tau prions in brain samples have been developed.			
FY 2021 Plans: While the COVID-19 pandemic has constrained our usual pace of research, we hope to continue 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. Newly developed highly sensitive tau prion assay techniques will be used on human specimens and animal models to identify the presence and time-course of tau prion involvement of the brain. Activities towards obtaining fresh frozen brain specimens from Service Members who developed CTE will be maximized in order to better characterize the nature of tau prions associated with this condition.			
FY 2022 Plans:			

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021		
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 2020	FY 2021	FY 2022
FY 2022 plans continue efforts as outlined in FY 2021.				
FY 2021 to FY 2022 Increase/Decrease Statement: Price adjustment for inflation.				
Accomplishments/Planned Programs Subtotals		13.317	13.583	13.855
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 2022 Defense Health Agency **Date:** May 2021

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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
508: Psychological Health and Resilience (USUHS)	0.000	7.000	7.140	7.283	-	7.283	-	-	-	-	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 2020	FY 2021	FY 2022
Title: Psychological Health and Resilience	7.000	7.140	7.283
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.			
FY 2021 Plans: FY 2021 Plans continue efforts as outlined in FY 2020. Specific goals include: 1. Collect the 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. Continue conducting state-of-the art analyses of the Army STARRS and STARRS-LS data and producing actionable findings for the Army and DoD. 3. Continue adapting the data collection and data analyses to meet new and emerging issues identified by the Army and DoD.			
FY 2022 Plans: FY 2022 plans continue efforts as outlined in FY 2021.			
FY 2021 to FY 2022 Increase/Decrease Statement: Price adjustment for inflation.			
Accomplishments/Planned Programs Subtotals	7.000	7.140	7.283

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

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
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>

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 2022 Defense Health Agency										Date: May 2021		
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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
509: Innovative Technologies for Improved Medical Diagnoses, Rehabilitation and Warfighter Readiness (USUHS)	0.000	19.323	13.710	14.104	-	14.104	-	-	-	-	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 2020	FY 2021	FY 2022
Title: Innovative Technologies for Improved Medical Diagnoses, Rehabilitation and Warfighter Readiness	19.323	13.710	14.104
<p>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 USU, the TTW program will cultivate, establish and leverage partnerships between USU 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.</p> <p>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.</p> <p>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 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</p>			

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / <i>Medical Technology Development</i>	Project (Number/Name) 509 / <i>Innovative Technologies for Improved Medical Diagnoses, Rehabilitation and Warfighter Readiness (USUHS)</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2020	FY 2021	FY 2022
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><i>FY 2021 Plans:</i> Support the advancement of medical technologies such as 1) wearable devices, 2) operational injuries, 3) rehabilitation, 4) precision medicine, and 5) rapid treatment and diagnostics at point of injury. In support of surgical critical care, develop, validate, and/or deploy eleven (11) predictive algorithms for conditions associated with high mortality and morbidity. Support robust medical education and training to ensure the battlefield surgeons of tomorrow are appropriately trained in the use of clinical and biomarker-based CDSTs. Define the optimal rehabilitation strategies and prosthetic selection, fitting and training for wounded warriors with osseointegration. Examine the clinical efficacy of virtual and augmented reality applications to enhance rehabilitation of individuals with extremity dysfunction and acquired brain injury.</p> <p><i>FY 2022 Plans:</i> FY 2022 plans continue efforts as outlined in FY 2021.</p> <p><i>FY 2021 to FY 2022 Increase/Decrease Statement:</i> Price adjustments for inflation.</p>			
Accomplishments/Planned Programs Subtotals	19.323	13.710	14.104

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 2022 Defense Health Agency										Date: May 2021		
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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
373: GDF - Medical Technology Development	1,130.117	78.868	5.000	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 six Joint Program Committees: 1- Medical Simulation and Information Sciences research aims to coordinate health information technology, simulation, and training research across the Military Health System. Technology development efforts are directed toward the medical simulation task. 2- Military Infectious Diseases research is developing protection and treatment products for military relevant infectious diseases. 3- 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 fitness of Service members. 4- 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. 5- Radiation Health Effects research focuses on technology development of acute radiation exposure medical countermeasures development. 6- Clinical and Rehabilitative Medicine research is developing knowledge and materiel products to reconstruct, rehabilitate, and provide care for injured Service members. Technology development efforts are directed against tasks in neuromusculoskeletal rehabilitation, pain management, regenerative medicine, and sensory systems.

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

Title: GDF – Medical Technology Development	FY 2020	FY 2021	FY 2022
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.	78.868	5.000	-
FY 2021 Plans: Congressional Add-Restoral			
FY 2021 to FY 2022 Increase/Decrease Statement: Congressional Add-Restoral			
Accomplishments/Planned Programs Subtotals	78.868	5.000	-

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

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
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)

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 2022 Defense Health Agency										Date: May 2021		
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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
373A: GDF - MTD (Combat Casualty Care)	0.000	0.000	11.168	15.736	-	15.736	-	-	-	-	Continuing	Continuing

A. Mission Description and Budget Item Justification

Medical Technology Development provides funds for the development of promising candidate solutions that are selected for initial safety and effectiveness testing in animal studies and/or human clinical trials regulated by the U. S. Food and Drug Administration prior to licensing for human use. Joint Battlefield Healthcare research is optimizing survival, recovery and rehabilitation in injured Service members across the spectrum of care from point of injury through enroute care and facilities care.

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

	FY 2020	FY 2021	FY 2022
Title: Joint Battlefield Healthcare (Formerly Combat Casualty Care)	-	11.168	15.736
Description: Joint Battlefield Healthcare medical technology development will continue to focus on investigating new diagnostic tools and treatments for prolonged battlefield hemorrhage control, how to best diagnose and treat severe neurotrauma from the point of injury to evacuation/enroute care and long term hospital and rehabilitative care, and research into optimizing the system wide movement of patients to different levels of care to ensure positive clinical outcomes.			
FY 2021 Plans: Joint Battlefield Healthcare medical technology development will continue to focus on investigating new diagnostic tools and treatments for prolonged battlefield hemorrhage control, how to best diagnose and treat severe neurotrauma from the point of injury to evacuation/enroute care and long term hospital and rehabilitative care, and research into optimizing the system wide movement of patients to different levels of care to ensure positive clinical outcomes.			
FY 2022 Plans: Joint Battlefield Healthcare 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 2021 to FY 2022 Increase/Decrease Statement: Increased funding for science and technology activities in patient movement, prolonged field care and enroute care to support medical readiness and return to duty requirements in future operational environments.			
Accomplishments/Planned Programs Subtotals	-	11.168	15.736

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
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>

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

N/A

Remarks

D. Acquisition Strategy

N/A

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency										Date: May 2021		
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)			
COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
373B: GDF - MTD (Military Operational Medicine)	0.000	0.000	23.255	19.046	-	19.046	-	-	-	-	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 countermeasures against operational stressors, or that prevent musculoskeletal, neurosensory, and psychological injuries during training and from point of injury through role of care four.

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

	FY 2020	FY 2021	FY 2022
Title: Military Health and Recovery (Formerly Military Operational Medicine)	-	23.255	19.046
Description: Efforts 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 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 2021 Plans: Efforts 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 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 2022 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 2021 to FY 2022 Increase/Decrease Statement: Decrease due to shifting requirements.			
Accomplishments/Planned Programs Subtotals	-	23.255	19.046

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
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>

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 2022 Defense Health Agency										Date: May 2021		
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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
373C: GDF - MTD (Medical Simulation & Training/Health Informatics)	0.000	0.000	12.613	13.044	-	13.044	-	-	-	-	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 2020	FY 2021	FY 2022
Title: Medical Simulation Technologies (Formerly Medical Simulation Technologies & Training/Health Informatics)	-	12.613	13.044
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 2021 Plans: 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;			

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
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 2020	FY 2021	FY 2022
<p>technologies that simulate combat scenarios to provide realistic environments; and, technologies that simulate patient movement through the continuum of care.</p> <p><i>FY 2022 Plans:</i> Conduct studies, investigations, and non-system specific technology effort focus on prototyping tissue models, technologies that simulate medical condition progress over time, personalized 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, including the brain and all organ systems of the body; 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 -including those anticipated from future weaponry, 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.</p> <p><i>FY 2021 to FY 2022 Increase/Decrease Statement:</i> Increase due to inflation</p>			
Accomplishments/Planned Programs Subtotals	-	12.613	13.044

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

N/A

Remarks

D. Acquisition Strategy

N/A

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency **Date:** May 2021

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)			
COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
373D: GDF - MTD (Clinical and Rehabilitation Medicine)	0.000	0.000	13.040	14.980	-	14.980	-	-	-	-	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 2020	FY 2021	FY 2022
Title: Clinical and Rehabilitation Medicine	-	13.040	14.980
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 2021 Plans: 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: Efforts will continue to focus on clinical and rehabilitation medicine to support clinical trials in neuromusculoskeletal injuries to provide products and information solutions for diagnosis, treatment, and rehabilitation outcomes for Service-related injuries; the development of 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 2021 to FY 2022 Increase/Decrease Statement: Increase supports planned expansion of Artificial Intelligence (AI) application effort for neuromusculoskeletal injury prevention and treatment integration.			
Accomplishments/Planned Programs Subtotals	-	13.040	14.980

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

N/A

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
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>

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

Remarks

D. Acquisition Strategy
N/A

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency **Date:** May 2021

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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
373E: GDF - MTD (Military Infectious Disease)	0.000	0.000	6.409	6.630	-	6.630	-	-	-	-	Continuing	Continuing

A. Mission Description and Budget Item Justification

Military infectious disease efforts continue to focus on the development of protection and treatment products for military relevant infectious diseases.

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

	FY 2020	FY 2021	FY 2022
Title: Military Infectious Disease	-	6.409	6.630
Description: Military infectious disease activities to support efforts (including clinical) to develop innovative therapeutics and delivery technologies for combat wound infections. These efforts include Combating Antibiotic Resistant bacteria as well as accelerating promising drug and vaccine solutions to emerging infectious diseases (e.g. chikungunya, MERS, and Zika).			
FY 2021 Plans: Military infectious disease activities to support efforts (including clinical) to develop innovative therapeutics and delivery technologies for combat wound infections. These efforts include Combating Antibiotic Resistant bacteria as well as accelerating promising drug and vaccine solutions to emerging infectious diseases (e.g. chikungunya, MERS, and Zika).			
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.			
FY 2021 to FY 2022 Increase/Decrease Statement: Funding change reflects planned lifecycle of this effort.			
Accomplishments/Planned Programs Subtotals	-	6.409	6.630

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

N/A

Remarks

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
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>

D. Acquisition Strategy
N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency **Date:** May 2021

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)
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COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
373F: GDF - MTD (Radiological Health Effects)	0.000	0.000	0.501	0.518	-	0.518	-	-	-	-	Continuing	Continuing

A. Mission Description and Budget Item Justification

Research and development in countermeasures for acute radiation exposure leading toward identification of post-exposure treatment of radiation injury. Developing an FDA-approved countermeasure for both pre-exposure prophylaxes and post-exposure treatments of acute radiation syndrome (ARS) will help improve health outcomes for radiation exposure injuries.

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

	FY 2020	FY 2021	FY 2022
Title: Radiological Health Effects	-	0.501	0.518
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 2021 Plans: 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: Continue 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 2021 to FY 2022 Increase/Decrease Statement: Funding change reflects planned lifecycle of this effort.			
Accomplishments/Planned Programs Subtotals	-	0.501	0.518

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

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
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 2022 Defense Health Agency										Date: May 2021		
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>			
COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
373G: <i>GDF - MTD (Military Medical Photonics)</i>	0.000	0.000	10.000	10.200	-	10.200	-	-	-	-	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 military medical needs 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 development and utilization of optical science and technology for diagnostic, imaging, and therapeutic solutions in support of combat casualty care.

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

	FY 2020	FY 2021	FY 2022
Title: Military Medical Photonics	-	10.000	10.200
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 2021 Plans: 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 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			

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
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 2020	FY 2021	FY 2022
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 2021 to FY 2022 Increase/Decrease Statement:</i> Funding change reflects planned lifecycle of this effort.			
Accomplishments/Planned Programs Subtotals	-	10.000	10.200

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 2022 Defense Health Agency **Date:** May 2021

Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0603115DHA / Medical Technology Development	Project (Number/Name) 519 / CARES Act - H.R. 748, (P.L. 116-136)
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COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
519: CARES Act - H.R. 748, (P.L. 116-136)	-	315.000	0.000	0.000	-	0.000	-	-	-	-	Continuing	Continuing

Note

Congressional Add: CARES Act - H.R. 748, (P.L. 116-136)

A. Mission Description and Budget Item Justification

CARES Act - H.R. 748, (P.L. 116-136)

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

	FY 2020	FY 2021
Congressional Add: CARES Act - H.R. 748, (P.L. 116-136)	315.000	-
FY 2020 Accomplishments: CARES Act - H.R. 748, (P.L. 116-136)		
Congressional Adds Subtotals	315.000	-

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 2022 Defense Health Agency **Date:** May 2021

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>							
COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
Total Program Element	1,423.290	1,174.955	147.331	142.252	-	142.252	-	-	-	-	Continuing	Continuing
400Z: <i>CSI - Congressional Special Interests</i>	401.343	1,036.900	0.000	0.000	-	0.000	-	-	-	-	Continuing	Continuing
434A: <i>Air & Space Medical Readiness Advanced Concept Development (AF)</i>	22.617	4.000	4.080	4.162	-	4.162	-	-	-	-	Continuing	Continuing
374: <i>GDF - Medical Products Support and Advanced Concept Development</i>	999.330	124.055	128.251	0.000	-	0.000	-	-	-	-	Continuing	Continuing
374A: <i>GDF - Medical Simulation and Training</i>	-	0.000	0.000	18.490	-	18.490	-	-	-	-	Continuing	Continuing
374B: <i>GDF - Medical Readiness</i>	-	-	-	48.816	-	48.816	-	-	-	-	Continuing	Continuing
374C: <i>GDF - Medical Combat Support</i>	-	0.000	0.000	49.661	-	49.661	-	-	-	-	Continuing	Continuing
374D: <i>GDF - Restoration & Healthcare Systems</i>	-	0.000	0.000	21.123	-	21.123	-	-	-	-	Continuing	Continuing
520: <i>CARES Act - H.R. 748, (P.L. 116-136)</i>	-	0.000	0.000	0.000	-	0.000	-	-	-	-	Continuing	Continuing
464: <i>CSI - Congressional Special Interests</i>	-	0.000	15.000	0.000	-	0.000	-	-	-	-	Continuing	Continuing
441: <i>CSI- Joint Warfighter Medical Research</i>	-	10.000	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 2022 Defense Health Agency **Date:** May 2021

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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Previous President's Budget	138.055	132.331	142.252	-	142.252
Current President's Budget	1,174.955	147.331	142.252	-	142.252
Total Adjustments	1,036.900	15.000	0.000	-	0.000
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	1,036.900	15.000			
• 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 Subtotals for Project: 400Z

Congressional Add Totals for all Projects

	FY 2020	FY 2021
	1,036.900	-
	1,036.900	-
	1,036.900	-

Change Summary Explanation

Project 520 was created for CARE Act funding.

\$936.900M of CARE Act DHP O&M funding was reprogrammed into Project 520 for RDTE purposes.

\$35.741M of 6.3 RDTE funding was reprogrammed into Project 520 for RDTE CARE ACT purposes.

\$64.042M of 6.3 RDTE funding was reprogrammed into Project 464 for RDTE CARE ACT purposes.

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency										Date: May 2021		
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>			
COST (\$ in Millions)	Prior Years (+)	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
400Z: <i>CSI - Congressional Special Interests</i>	401.343	1,036.900	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 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 2020	FY 2021
Congressional Add: 441A - Joint Warfighter Medical Research Program	1,036.900	-
FY 2020 Accomplishments: CSI Add		
Congressional Adds Subtotals	1,036.900	-

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

N/A

Remarks

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 2022 Defense Health Agency										Date: May 2021		
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>			
COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
434A: <i>Air & Space Medical Readiness Advanced Concept Development (AF)</i>	22.617	4.000	4.080	4.162	-	4.162	-	-	-	-	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)

	FY 2020	FY 2021	FY 2022
Title: Air & Space Medical Readiness Advanced Concept Development (AF)	4.000	4.080	4.162
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 2021 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 hand-held 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 2022 Plans: FY22 plans continue efforts as outlined in FY 2021.			
FY 2021 to FY 2022 Increase/Decrease Statement:			

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency	Date: May 2021
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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 2020	FY 2021	FY 2022
Funding increase due to inflation.			
Accomplishments/Planned Programs Subtotals	4.000	4.080	4.162

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

N/A

Remarks

Accomplishments: Made significant advancements towards the materiel development of the Patient Loading System (PLS), an en route care ramp system for on- / off-boarding with high deck aircraft. Additionally, the Field Intravenous Expeditionary System yielded two prototypes that are undergoing early operational assessments prior to entry into Phase III / EMD and Design Freeze Optimization. Lastly, the Automated Vision Tester (AVT) and the Flashing Indicator of Swimmers' Health (FISH) projects have either reached or are nearing prototype design and are set to begin EMD prior to the close of CY20.

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 2022 Defense Health Agency										Date: May 2021		
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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
374: GDF - Medical Products Support and Advanced Concept Development	999.330	124.055	128.251	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 2020	FY 2021	FY 2022
Title: GDF – Medical Product Support and Advanced Concept Development	124.055	128.251	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 2021 Plans:			
Medical Simulation and Training: 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 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 maximize the training simulations, manikins and healthcare across the Department of Defense.			

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021		
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>		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2020	FY 2021	FY 2022
<p>Medical Readiness: Programs will focus on prevention of illness and injury along with optimization of human performance. The Pharmaceutical Intervention for Noise-Induced Hearing Loss-Acute Exposure Treatment program will continue development of the Capability Development Document with Key Performance Parameters and continue progress with an on-going clinical trial with a promising drug treatment candidate. The Broad Spectrum Snake Bite antidote initiates clinical trials to elevate safety and effectiveness of the capability.</p> <p>Medical Combat Support: Programs will focus on operational support. The Hemorrhage Detection program will continue development of the Capability Development Document with Key Performance Parameters along with a laboratory-based technology analysis study to inform ability for the capability to be deployed to Roles 1-3. The Traumatic Brain Injury (TBI) Assessment and Diagnosis program will continue to integrate information from end user feedback, field evaluations in the deployed environment, and market research to identify a solution to aid the medical provider in the ability to triage and monitor a moderate/severe TBI. The Non-Compressible Hemorrhage Control program will continue to expand as a family of systems approach to identify potential solutions that would fulfill this gap. Efficacy of developmental items will be evaluated in clinical studies. The Joint Medical Exchange and Documentation of Information for Combat Casualty Care program will continue to conduct prototype demonstrations in operational and simulated field environments. Initiate K-9 blood product and Multi Channel Infusion Pump capability efforts.</p> <p>Restoration and Healthcare Systems: Programs will focus on treatments to be used to restore form and function to warfighters as well as improve healthcare. The Traumatic Brain Injury-Drug Treatment program will continue to evaluate market research to identify possible TBI drug candidates that are ready for focused Phase II clinical trials and conduct clinical trial planning. The Post Traumatic Stress Disorder-Drug Treatment program will continue to explore options for simultaneous testing of multiple drugs using an innovative testing design.</p> <p>FY 2022 Plans: Starting in FY 2022, funding from Project 374 was realigned to Projects 374A, 374B, 374C, and 374D.</p> <p>FY 2021 to FY 2022 Increase/Decrease Statement: Starting in FY 2022, funding from Project 374 was realigned to Projects 374A, 374B, 374C, and 374D.</p>				
Accomplishments/Planned Programs Subtotals		124.055	128.251	0.000
C. Other Program Funding Summary (\$ in Millions)				
N/A				
Remarks				

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
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>

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 2022 Defense Health Agency **Date:** May 2021

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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
374A: GDF - Medical Simulation and Training	-	0.000	0.000	18.490	-	18.490	-	-	-	-	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)

Title: GDF - Medical Simulation and Training	FY 2020	FY 2021	FY 2022
<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 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 maximize the training simulations, manikins and healthcare across the Department of Defense.</p> <p>FY 2021 to FY 2022 Increase/Decrease Statement: Funding for Project 374A was realigned from Projects 374</p>	-	-	18.490
Accomplishments/Planned Programs Subtotals	-	-	18.490

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
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>

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 2022 Defense Health Agency **Date:** May 2021

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
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COST (\$ in Millions)	Prior Years (+)	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
374B: GDF - Medical Readiness	-	-	-	48.816	-	48.816	-	-	-	-	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 2020	FY 2021	FY 2022
Title: GDF - Medical Readiness	-	-	48.816
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. The Pharmaceutical Intervention for Noise-Induced Hearing Loss-Acute Exposure Treatment program will continue development of the Capability Development Document with Key Performance Parameters and continue progress with an on-going clinical trial with a promising drug treatment candidate. Continue Broad Spectrum Snake Bite antidote clinical trials to elevate safety and effectiveness of the capability.			
FY 2021 to FY 2022 Increase/Decrease Statement: Funding for Project 374B was realigned from Projects 374.			
Accomplishments/Planned Programs Subtotals	-	-	48.816

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

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
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>

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

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 2022 Defense Health Agency										Date: May 2021		
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			
COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
374C: GDF - Medical Combat Support	-	0.000	0.000	49.661	-	49.661	-	-	-	-	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. The Hemorrhage Detection program will continue development of the Capability Development Document with Key Performance Parameters along with a laboratory-based technology analysis study to inform ability for the capability to be deployed to Roles 1-3. The Traumatic Brain Injury (TBI) Assessment and Diagnosis program will continue to integrate information from end user feedback, field evaluations in the deployed environment, and market research to identify a solution to aid the medical provider in the ability to triage and monitor a moderate/severe TBI. The Non-Compressible Hemorrhage Control program will continue to expand as a family of systems approach to identify potential solutions that would fulfill this gap. Efficacy of developmental items will be evaluated in clinical studies. The Joint Medical Exchange and Documentation of Information for Combat Casualty Care program will continue to conduct prototype demonstrations in operational and simulated field environments. Also, continue the K-9 blood product and Multi Channel Infusion Pump capability efforts.

FY 2021 to FY 2022 Increase/Decrease Statement:

	FY 2020	FY 2021	FY 2022
	-	-	49.661

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
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 2020	FY 2021	FY 2022
Funding for Project 374C was realigned from Projects 374.			
Accomplishments/Planned Programs Subtotals	-	-	49.661

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 2022 Defense Health Agency **Date:** May 2021

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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
374D: GDF - Restoration & Healthcare Systems	-	0.000	0.000	21.123	-	21.123	-	-	-	-	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)

	FY 2020	FY 2021	FY 2022
Title: GDF - Restoration & Healthcare Systems	-	-	21.123
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. The Traumatic Brain Injury-Drug Treatment program will continue to evaluate market research to identify possible TBI drug candidates that are ready for focused Phase II clinical trials and conduct clinical trial planning. The Post Traumatic Stress Disorder-Drug Treatment program will continue to explore options for simultaneous testing of multiple drugs using an innovative testing design. Continued clinical trials for effectiveness of bacteriophage treatment for bacteria infections.			
FY 2021 to FY 2022 Increase/Decrease Statement: Funding for Project 374D was realigned from Projects 374. This Project is not a new start.			
Accomplishments/Planned Programs Subtotals	-	-	21.123

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

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
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>

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

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 2022 Defense Health Agency **Date:** May 2021

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) 520 / <i>CARES Act - H.R. 748, (P.L. 116-136)</i>
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COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
520: <i>CARES Act - H.R. 748, (P.L. 116-136)</i>	-	0.000	0.000	0.000	-	0.000	-	-	-	-	Continuing	Continuing

Note

Congressional Add: CARES Act - H.R. 748, (P.L. 116-136)

A. Mission Description and Budget Item Justification

CARES Act - H.R. 748, (P.L. 116-136)

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

N/A

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 2022 Defense Health Agency **Date:** May 2021

Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0604110DHA / Medical Products Support and Advanced Concept Development	Project (Number/Name) 464 / CSI - Congressional Special Interests
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COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
464: CSI - Congressional Special Interests	-	0.000	15.000	0.000	-	0.000	-	-	-	-	Continuing	Continuing

A. Mission Description and Budget Item Justification

CARES Act - H.R. 748, (P.L. 116-136)

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

	FY 2020	FY 2021	FY 2022
Title: CARES Act - H.R. 748, (P.L. 116-136)	-	15.000	-
Description: CARES Act - H.R. 748, (P.L. 116-136) Reprogramming in support of COVID vaccine capabilities and wearables.			
FY 2021 Plans: Reprogramming in support of COVID vaccine capabilities and wearables.			
FY 2021 to FY 2022 Increase/Decrease Statement: Increase due to inflation.			
Accomplishments/Planned Programs Subtotals	-	15.000	-

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 2022 Defense Health Agency **Date:** May 2021

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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
441: CSI- Joint Warfighter Medical Research	-	10.000	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 2020	FY 2021	FY 2022
Title: CSI- Joint Warfighter Medical Research	10.000	-	-
Description: Congressional Add In			
Accomplishments/Planned Programs Subtotals	10.000	-	-

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 2022 Defense Health Agency **Date:** May 2021

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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COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
Total Program Element	80.625	23.780	16.344	10.866	-	10.866	0.000	0.000	0.000	0.000	Continuing	Continuing
239H: <i>IM/IT Test Bed (Air Force) at DHA</i>	6.498	2.740	2.795	0.723	-	0.723	-	-	-	-	Continuing	Continuing
482A: <i>E-Commerce (DHA)</i>	20.808	4.284	4.370	0.959	-	0.959	-	-	-	-	Continuing	Continuing
480D: <i>Defense Occupational and Environmental Health Readiness System - Industrial Hygiene (DOEHRS-IH) (Tri-Service)</i>	25.129	3.941	8.714	8.701	-	8.701	-	-	-	-	Continuing	Continuing
423C: <i>Defense Center of Excellence (T2T/PBH TERM) (DHA)</i>	4.032	1.450	0.465	0.483	-	0.483	-	-	-	-	Continuing	Continuing
283C: <i>Medical Operational Data System (MODS) (Army)</i>	13.631	2.759	0.000	0.000	-	0.000	-	-	-	-	Continuing	Continuing
283H: <i>Psychological and Behavioral Health - Tools for Evaluation, Risk, and Management (PBH-TERM)</i>	0.279	0.000	0.000	0.000	-	0.000	-	-	-	-	Continuing	Continuing
283L: <i>Pharmacovigilance Defense Application System</i>	1.698	0.350	0.000	0.000	-	0.000	-	-	-	-	Continuing	Continuing
283P: <i>Mobile HealthCare Environment (MHCE)</i>	1.383	0.473	0.000	0.000	-	0.000	-	-	-	-	Continuing	Continuing
480R: <i>Joint Disability Evaluation System IT (DHA)</i>	1.636	0.000	0.000	0.000	-	0.000	-	-	-	-	Continuing	Continuing
485: <i>Legacy Data Repository (DHA-C)</i>	5.531	5.856	0.000	0.000	-	0.000	-	-	-	-	Continuing	Continuing
505: <i>Military Health System Virtual Health Program (MHS VHP)</i>	0.000	1.927	0.000	0.000	-	0.000	-	-	-	-	Continuing	Continuing

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Exhibit R-2, RDT&E Budget Item Justification: PB 2022 Defense Health Agency Date: May 2021

Appropriation/Budget Activity 0130: Defense Health Program I BA 2: RDT&E R-1 Program Element (Number/Name) PE 0605013DHA I Information Technology Development

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).

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 using RDT&E funding include: Defense Occupational and Environmental Health Readiness System – Industrial Hygiene (DOEHS-IH), Legacy Data Repository (LDR), and Defense Center of Excellence (Telehealth and Technology Toolkit (T2T)).

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).

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 using RDT&E funding include: Defense Occupational and Environmental Health Readiness System – Industrial Hygiene (DOEHS-IH), Legacy Data Repository (LDR), and Defense Center of Excellence (Telehealth and Technology Toolkit (T2T)).

The DHP RDT&E appropriation includes the following DHA initiatives: MHS Virtual Health Program (MHS VHP) and 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

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Exhibit R-2, RDT&E Budget Item Justification: PB 2022 Defense Health Agency	Date: May 2021
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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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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 2020</u>	<u>FY 2021</u>	<u>FY 2022 Base</u>	<u>FY 2022 OCO</u>	<u>FY 2022 Total</u>
Previous President's Budget	23.780	16.344	10.866	-	10.866
Current President's Budget	23.780	16.344	10.866	-	10.866
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	-			

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency										Date: May 2021		
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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
239H: <i>IM/IT Test Bed (Air Force) at DHA</i>	6.498	2.740	2.795	0.723	-	0.723	-	-	-	-	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 2020	FY 2021	FY 2022
Title: Operational Testing Service	2.740	2.795	0.723
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 2021 Plans: As in prior years, DHA will transfer funding to AF Medical IT during year of execution. AF will continue to test the DHMSM Electronic Health Record, JOMIS, Legacy TMIP, DMIX and HAIMS. Multi-Service Operational Test and Evaluation(s) will be conducted for the DHMSM Fixed Facility sites and the JOMIS Operational Medicine locations. Plans are to 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, similar to FY18.			
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 2021 to FY 2022 Increase/Decrease Statement:			

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
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 2020	FY 2021	FY 2022
Decrease due to realignment of funding from RDT&E to O&M based on transitioning requirements			
Accomplishments/Planned Programs Subtotals	2.740	2.795	0.723

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 2022 Defense Health Agency										Date: May 2021		
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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
482A: <i>E-Commerce (DHA)</i>	20.808	4.284	4.370	0.959	-	0.959	-	-	-	-	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 2020	FY 2021	FY 2022
Title: E-Commerce (DHA)	4.284	4.370	0.959
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-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			

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
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>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2020	FY 2021	FY 2022
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.			
<i>FY 2021 Plans:</i> Plans include more modernization to healthcare financial processing, contracts, and reporting as well as adapting to health care policy and guidance			
<i>FY 2022 Plans:</i> Will continue to modernize the Electronic Commerce System for contracts, and reporting as well as adapting to health care policy and guidance.			
<i>FY 2021 to FY 2022 Increase/Decrease Statement:</i> Realigned funding to DHP O&M as parts of the system transition to sustainment			
Accomplishments/Planned Programs Subtotals	4.284	4.370	0.959

C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
• BA-1, 0807752HP:	0.132	0.132	0.135	-	0.135	0.138	-	-	-	Continuing	Continuing
<i>Miscellaneous Support Activities</i>											
• BA-3, 0807721HP:	0.561	0.571	0.583	-	0.583	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 2022 Defense Health Agency **Date:** May 2021

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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
480D: Defense Occupational and Environmental Health Readiness System - Industrial Hygiene (DOEHRS-IH) (Tri-Service)	25.129	3.941	8.714	8.701	-	8.701	-	-	-	-	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's 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 2020	FY 2021	FY 2022
Title: Defense Occupational and Environmental Health Readiness System - Industrial Hygiene (DOEHRS-IH) (Tri-Service)	3.941	8.714	8.701
Description: Configure, enhance, and interface DOEHRS-IH modules.			
FY 2021 Plans: Developing software 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.			
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.			
FY 2021 to FY 2022 Increase/Decrease Statement:			

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
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>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2020	FY 2021	FY 2022
Funding decreased based on requirements for FY 2022.			
Accomplishments/Planned Programs Subtotals	3.941	8.714	8.701

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 2022 Defense Health Agency **Date:** May 2021

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>
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COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
423C: <i>Defense Center of Excellence (T2T/PBH TERM) (DHA)</i>	4.032	1.450	0.465	0.483	-	0.483	-	-	-	-	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 2020	FY 2021	FY 2022
Title: Defense Center of Excellence (DHA) T2T and PBH TERM	1.450	0.465	0.483
<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 2021 Plans: Support for web services development software.</p> <p>FY 2022 Plans: Will continue support for web services development software</p> <p>FY 2021 to FY 2022 Increase/Decrease Statement:</p>			

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
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 2020	FY 2021	FY 2022
Increase between FY21 to FY22 is due to inflation			
Accomplishments/Planned Programs Subtotals	1.450	0.465	0.483

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 2022 Defense Health Agency **Date:** May 2021

Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0605013DHA / Information Technology Development	Project (Number/Name) 283C / Medical Operational Data System (MODS) (Army)
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COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
283C: Medical Operational Data System (MODS) (Army)	13.631	2.759	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 2020	FY 2021	FY 2022
Title: Medical Operational Data System (MODS)	2.759	-	-
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	2.759	-	-

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

Line Item	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
• BA-1, 0807781HP: Non-Central Information Management/ Information Technology	13.878	0.000	0.000	-	0.000	0.000	-	-	-	Continuing	Continuing
• BA-3, 0807721HP: Replacement/Modernization	0.200	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 2022 Defense Health Agency **Date:** May 2021

Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0605013DHA / <i>Information Technology Development</i>	Project (Number/Name) 283H / <i>Psychological and Behavioral Health - Tools for Evaluation, Risk, and Management (PBH-TERM)</i>
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COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
283H: <i>Psychological and Behavioral Health - Tools for Evaluation, Risk, and Management (PBH-TERM)</i>	0.279	0.000	0.000	0.000	-	0.000	-	-	-	-	Continuing	Continuing

A. Mission Description and Budget Item Justification

The US Army Medical Command (MEDCOM) and Defense Centers of Excellence (DCoE) have partnered to develop this information technology project for joint Service level support. The PBH-TERM platform addresses two congressionally mandated initiatives including the behavioral health management within the Warrior Transition Command (GH risk Management module/BHRM and within primary care settings (FIRST-STEPS). Further development efforts allow expansion of capabilities to deliver ongoing user support and training via web-based modules within PBH-TERM and will provide costs casings in terms of staffing requirements, conferencing and reporting.

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

	FY 2020	FY 2021	FY 2022
Title: Psychological and Behavioral Health – Tools for Evaluation, Risk, and Management (PBH-TERM)	0.000	-	-
Description: PBH-TERM is a web-based psychological and Behavioral Health (BH) information technology platform, which supports evidence-based, standardized and integrated BH risk and case management initiatives as well as program evaluation for the Warrior Transition Command and Patient/Soldier-Centered BH (PCBH) care in primary care settings.			
Accomplishments/Planned Programs Subtotals	0.000	-	-

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

Line Item	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
• BA-1, 0807781HP: <i>Non-Central Information Management/ Information Technology</i>	0.000	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	0.000	-	-	-	Continuing	Continuing
• BA-1, 0807793DHA: <i>MHS Tri-Service Information Management/ Information Technology (IM/IT)</i>	0.074	0.074	0.074	-	0.074	0.074	-	-	-	Continuing	Continuing

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0605013DHA / <i>Information Technology Development</i>	Project (Number/Name) 283H / <i>Psychological and Behavioral Health - Tools for Evaluation, Risk, and Management (PBH-TERM)</i>

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

<u>Line Item</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u> <u>Base</u>	<u>FY 2022</u> <u>OCO</u>	<u>FY 2022</u> <u>Total</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
Remarks											
BAG 104 funding moved to DHA starting on 01 Oct 2015 per FY 2016 POM MOA.											
BAG 103 funding moved to DHA starting on 01 Oct 2016 per FY 2017 POM MOA. Moving DCoE to DHA (BA-1, 0807714HP)											

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 congressional mandates and 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 2022 Defense Health Agency **Date:** May 2021

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>			
COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
283L: <i>Pharmacovigilance Defense Application System</i>	1.698	0.350	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 2020	FY 2021	FY 2022
Title: Pharmacovigilance Defense Application System (PVDAS)	0.350	-	-
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			
	0.350	-	-

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

Line Item	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
• BA-1, 0807781HP: <i>Non-Central Information Management/ Information Technology</i>	0.000	0.000	0.000	-	0.000	0.000	-	-	-	Continuing	Continuing
• BA-1, 0807714HP: <i>Other Health Activities</i>	2.048	0.000	0.000	-	0.000	0.000	-	-	-	Continuing	Continuing
• BA-1, 0807798HP: <i>Management Headquarters</i>	1.650	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 2022 Defense Health Agency **Date:** May 2021

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>			
COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
283P: <i>Mobile HealthCare Environment (MHCE)</i>	1.383	0.473	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 2020	FY 2021	FY 2022
Title: Mobile HealthCare Environment (MHCE)	0.473	-	-
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	0.473	-	-

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

Line Item	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
• BA-1, 0807781HP: <i>Non-Central Information Management/ Information Technology</i>	1.551	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 2022 Defense Health Agency **Date:** May 2021

Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0605013DHA / <i>Information Technology Development</i>	Project (Number/Name) 480R / <i>Joint Disability Evaluation System IT (DHA)</i>
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COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
480R: <i>Joint Disability Evaluation System IT (DHA)</i>	1.636	0.000	0.000	0.000	-	0.000	-	-	-	-	Continuing	Continuing

A. Mission Description and Budget Item Justification

JDES-IT will provide case level management, tracking and reporting capability that will provide Disability Evaluation System (DES) processors and stakeholders increased transparency of a case through an automated IT solution. Case files and DES information will be electronically transferred and shared within Service components, between the Services, and with Veterans Affairs. The future environment would also include information exchange capability with existing Human Resources (HR) and medical systems to reduce duplicative entry. Funding previously reported under Disability Mediation Service prior to finalize decision on the JDES-IT.

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

	FY 2020	FY 2021	FY 2022
Title: Joint Disability Evaluation System IT (JDES-IT)	0.000	-	-
Description: JDES-IT will provide case level management, tracking and reporting capability that will provide Disability Evaluation System (DES) processors and stakeholders increased transparency of a case through an automated IT solution.			
Accomplishments/Planned Programs Subtotals	0.000	-	-

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

N/A

Remarks

D. Acquisition Strategy

Not applicable.

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency										Date: May 2021		
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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
485: <i>Legacy Data Repository (DHA-C)</i>	5.531	5.856	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 2020	FY 2021	FY 2022
Title: Legacy Data Repository	5.856	-	-
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.			
Accomplishments/Planned Programs Subtotals	5.856	-	-

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
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>

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 2022 Defense Health Agency **Date:** May 2021

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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
505: <i>Military Health System Virtual Health Program (MHS VHP)</i>	0.000	1.927	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)

Title: Military Health System Virtual Health Program (MHS VHP)	FY 2020	FY 2021	FY 2022
Description: GOAL: The MHS VHP will connect our beneficiaries to health care globally to increase readiness, access, quality, and patient safety.	1.927	-	-
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	1.927	-	-

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

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
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)

Remarks

D. Acquisition Strategy

To be determined as program matures.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2022 Defense Health Agency **Date:** May 2021

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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
Total Program Element	807.544	14.478	18.336	15.751	-	15.751	0.000	0.000	0.000	0.000	Continuing	Continuing
483A: <i>Information Technology Development - DoD Healthcare Management System Modernization (DHMSM) at DHA</i>	807.544	14.478	18.336	15.751	-	15.751	0.000	0.000	0.000	0.000	Continuing	Continuing

Program MDAP/MAIS Code:
Project MDAP/MAIS Code(s): 496

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.

B. Program Change Summary (\$ in Millions)	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Previous President's Budget	14.478	18.336	15.751	-	15.751
Current President's Budget	14.478	18.336	15.751	-	15.751
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	-	-			

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency **Date:** May 2021

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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
483A: <i>Information Technology Development - DoD Healthcare Management System Modernization (DHMSM) at DHA</i>	807.544	14.478	18.336	15.751	-	15.751	0.000	0.000	0.000	0.000	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 2020	FY 2021	FY 2022
<p>Title: DoD Healthcare Management System Modernization (DHMSM) Program</p> <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 2021 Plans: FY21 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. 	14.478	18.336	15.751

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
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 2020	FY 2021	FY 2022
<p>FY21 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>FY21 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 2022 Plans:</p> <p>FY 2022 Plans:</p> <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 2021 to FY 2022 Increase/Decrease Statement:</p> <p>FY 2022 RDT&E funds decrease in accordance with acquisition schedule.</p>			
Accomplishments/Planned Programs Subtotals	14.478	18.336	15.751

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

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
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>

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 2022 Defense Health Agency **Date:** May 2021

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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
Total Program Element	177.045	41.902	46.214	52.948	-	52.948	-	-	-	-	Continuing	Continuing
447A: <i>Joint Operational Medicine Information System (JOMIS)</i>	177.045	41.902	46.214	52.948	-	52.948	-	-	-	-	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 2020</u>	<u>FY 2021</u>	<u>FY 2022 Base</u>	<u>FY 2022 OCO</u>	<u>FY 2022 Total</u>
Previous President's Budget	41.902	46.214	52.948	-	52.948
Current President's Budget	41.902	46.214	52.948	-	52.948
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	-	-			

Change Summary Explanation

FY 2021: Realignment of funding to BA 08 (Software and Digital Technology Pilot Program).

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency										Date: May 2021		
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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
447A: Joint Operational Medicine Information System (JOMIS)	177.045	41.902	46.214	52.948	-	52.948	-	-	-	-	Continuing	Continuing

A. Mission Description and Budget Item Justification

The purpose of JOMIS is to modernize, deploy, and sustain the DoD’s OpMed IS while developing and fielding new theater 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 2020	FY 2021	FY 2022
Title: Joint Operational Medicine Information System (JOMIS)	41.902	46.214	52.948
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 2021 Plans: FY 2021 Plans:			
<ul style="list-style-type: none"> • Document Capabilities Need Statements (CNS) and User Agreements (UA) with the Program Executive Office (PEO) • Transform the legacy CDD to a modern concept 			

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0605045DHA / <i>Joint Operational Medicine Information System (JOMIS)</i>	Project (Number/Name) 447A / <i>Joint Operational Medicine Information System (JOMIS)</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2020	FY 2021	FY 2022
<ul style="list-style-type: none"> • Develop User Engagement Concept of Operations (CONOPS) • Develop Test and Evaluation and Cyber Integration CONOPS • Gather lessons learned from experiential learning • Ensure approved and modernized delivery model • Develop Strategic Research CONOPS • Create legacy sunset plan • Consolidate functional area documentation • Develop program-level integration CONOPS • Create Program-level metrics <p>FY 2022 Plans: FY 2022 Plans:</p> <ul style="list-style-type: none"> • Execute OpMed Capability Roadmap • 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, Health Assessment Lite Operations (HALO), and Theater Blood Management system <p>FY 2021 to FY 2022 Increase/Decrease Statement: Reflects the program's updated strategy and timeline.</p>			
Accomplishments/Planned Programs Subtotals	41.902	46.214	52.948

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

N/A

Remarks

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 2022 Defense Health Agency **Date:** May 2021

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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
Total Program Element	160.599	21.589	21.068	21.489	-	21.489	-	-	-	-	Continuing	Continuing
399A: <i>Hyperbaric Oxygen Therapy Clinical Trial (Army)</i>	28.619	0.000	0.000	0.000	-	0.000	-	-	-	-	Continuing	Continuing
500A: <i>CSI - Congressional Special Interests</i>	18.382	0.000	0.000	0.000	-	0.000	-	-	-	-	Continuing	Continuing
375: <i>GDF - Medical Products and Support System Development</i>	113.598	21.589	21.068	0.000	-	0.000	-	-	-	-	Continuing	Continuing
375A: <i>GDF - Medical Simulation and Training</i>	0.000	0.000	0.000	2.000	-	2.000	-	-	-	-	Continuing	Continuing
375B: <i>GDF - Medical Readiness</i>	-	0.000	0.000	8.536	-	8.536	-	-	-	-	Continuing	Continuing
375C: <i>GDF - Medical Combat Support</i>	0.000	0.000	0.000	10.953	-	10.953	-	-	-	-	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 2022 Defense Health Agency **Date:** May 2021

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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Previous President's Budget	21.589	21.068	21.489	-	21.489
Current President's Budget	21.589	21.068	21.489	-	21.489
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	0.000			

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

Project: 500A: *CSI - Congressional Special Interests*

Congressional Add: *CSI - Congressional Speical Interest*

	FY 2020	FY 2021
	0.000	0.000
Congressional Add Subtotals for Project: 500A	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 2022 Defense Health Agency										Date: May 2021		
Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0605145DHA / Medical Products and Support Systems Development				Project (Number/Name) 399A / Hyperbaric Oxygen Therapy Clinical Trial (Army)			
COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
399A: Hyperbaric Oxygen Therapy Clinical Trial (Army)	28.619	0.000	0.000	0.000	-	0.000	-	-	-	-	Continuing	Continuing

A. Mission Description and Budget Item Justification

For the Army, the Hyperbaric Oxygen Therapy (HBO2) clinical trials focus on research related to the development of treatment modalities using HBO2 for chronic post-concussion syndrome after mild traumatic brain injury (mTBI). Three HBO2 human clinical trials were designed to evaluate the effectiveness of HBO2 treatments for Service members who have experienced one or more concussions and who are symptomatic at, or after, the time of post-deployment health reassessments: 1- A pilot phase II (narrow population safety and effectiveness) study of hyperbaric oxygen for persistent post-concussive symptoms after mild traumatic brain injury (HOPPS), 2- Brain Injury and Mechanisms of Action of Hyperbaric Oxygen for Persistent Post-Concussive Symptoms after Mild Traumatic Brain Injury (BIMA), and 3- Development of Normative Datasets for Assessments Planned for Use in Patients with Mild Traumatic Brain Injury (Normal). A fourth retrospective study, Long Term Follow-up (LTFU), is focused on the lessons learned from long-term follow-up of subjects enrolled in the Department of Defense (DoD) primary HBO2 trials. To support these protocols, four HBO2 study sites were established within the Military Health System. Each of the research sites consisted of a hyperbaric oxygen chamber enclosed in a mobile trailer, a second mobile trailer for testing and evaluation of the subjects, and a third subject staging trailer. This information is intended to inform DoD policy decisions regarding the use of HBO2 therapy as a treatment for mTBI.

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

	FY 2020	FY 2021	FY 2022
Title: Hyperbaric Oxygen Therapy Clinical Trial (Army)	0.000	-	-
Description: The Hyperbaric Oxygen (HBO2) clinical trials are designed to test the effectiveness of HBO2 treatments for Service members who have experienced one or more concussions and who are symptomatic at, or after, the time of post-deployment health reassessments.			
Accomplishments/Planned Programs Subtotals	0.000	-	-

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

N/A

Remarks

D. Acquisition Strategy

The acquisition outcome of this effort is a knowledge product, with the results intended to inform DoD mTBI treatment and reimbursement policies. The decision to pursue FDA registration/off-label application of an existing drug-device combination product will be made as part of a formal decision by leadership after the DoD HBO2 trial results are reviewed. If future work using HBO2 proves beneficial in the treatment of PTSD this knowledge product would inform DoD treatment and reimbursement policies.

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency **Date:** May 2021

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			
COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
500A: CSI - Congressional Special Interests	18.382	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 2020	FY 2021
Congressional Add: CSI - Congressional Speical Interest	0.000	0.000
FY 2020 Accomplishments: No CSI		
FY 2021 Plans: No CSI		
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 2022 Defense Health Agency **Date:** May 2021

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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
375: GDF - Medical Products and Support System Development	113.598	21.589	21.068	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)

Title: GDF - Medical Products and Support Systems Development (GDF-MPSSD)

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.

FY 2021 Plans:

Medical Simulation and Training: 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.

Medical Readiness: Programs will focus on prevention of illness and injury along with optimization of human performance. The Health Readiness and Performance System will continue to refine technologies including wearable sensors to monitor nondiagnostic physiologic data in real-time to improve Warfighter health, readiness and performance, reduce casualties, and increase situational awareness.

	FY 2020	FY 2021	FY 2022
	21.589	21.068	-

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021		
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0605145DHA / <i>Medical Products and Support Systems Development</i>	Project (Number/Name) 375 / <i>GDF - Medical Products and Support System Development</i>		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2020	FY 2021	FY 2022
Medical Combat Support: Programs will focus on operational support. The Next Generation Diagnostic System-Infectious Disease Panel program obtained FDA Approval. FY 2021 to FY 2022 Increase/Decrease Statement: Starting in FY 2022, Project 375 is being realigned into Projects 375A, 375B, and 375C.				
Accomplishments/Planned Programs Subtotals		21.589	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 2022 Defense Health Agency **Date:** May 2021

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
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COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
375A: GDF - Medical Simulation and Training	0.000	0.000	0.000	2.000	-	2.000	-	-	-	-	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 2020	FY 2021	FY 2022
Title: GDF - Medical Simulation and Training	-	-	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 2021 to FY 2022 Increase/Decrease Statement: Starting in FY 2022, Project 375A was realigned from Project 375.			
Accomplishments/Planned Programs Subtotals	-	-	2.000

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

N/A

Remarks

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
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>

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 2022 Defense Health Agency **Date:** May 2021

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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
375B: GDF - Medical Readiness	-	0.000	0.000	8.536	-	8.536	-	-	-	-	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 2020	FY 2021	FY 2022
Title: GDF - Medical Readiness	-	-	8.536
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.			
FY 2022 Plans: Programs will focus on prevention of illness and injury along with optimization of human performance. The Health Readiness and Performance System will continue to refine technologies including wearable sensors to monitor non diagnostic physiologic data in real-time to improve Warfighter health, readiness and performance, reduce casualties, and increase situational awareness.			
FY 2021 to FY 2022 Increase/Decrease Statement: Starting in FY 2022, Project 375B was realigned from Project 375.			
Accomplishments/Planned Programs Subtotals	-	-	8.536

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 2022 Defense Health Agency **Date:** May 2021

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>
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COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
375C: <i>GDF - Medical Combat Support</i>	0.000	0.000	0.000	10.953	-	10.953	-	-	-	-	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 2020	FY 2021	FY 2022
Title: GDF - Medical Combat Support	-	-	10.953
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 Cold Stored Platelets and Battlefield Pain Management clinical trials.			
FY 2021 to FY 2022 Increase/Decrease Statement: Starting in FY 2022, Project 375C was realigned from Project 375.			
Accomplishments/Planned Programs Subtotals	-	-	10.953

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-2, RDT&E Budget Item Justification: PB 2022 Defense Health Agency **Date:** May 2021

Appropriation/Budget Activity 0130: <i>Defense Health Program I BA 2: RDT&E</i>	R-1 Program Element (Number/Name) PE 0606105DHA / <i>Medical Program-Wide Activities</i>
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COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
Total Program Element	401.961	69.219	48.672	49.645	-	49.645	-	-	-	-	Continuing	Continuing
433A: <i>NMRC Biological Defense Research Directorate (BDRD) (Navy)</i>	20.799	5.163	3.267	3.371	-	3.371	-	-	-	-	Continuing	Continuing
494A: <i>Medical Development (Lab Support) (Navy)</i>	121.210	42.554	45.405	46.274	-	46.274	-	-	-	-	Continuing	Continuing
305T: <i>USAMRIID IO&T (Army)</i>	110.118	0.000	0.000	0.000	-	0.000	-	-	-	-	Continuing	Continuing
401A: <i>CONUS Laboratory Support Clinical Infrastructure (Army)</i>	38.946	5.358	0.000	0.000	-	0.000	-	-	-	-	Continuing	Continuing
432A: <i>OCONUS Laboratory Infrastructure Support (Army)</i>	76.403	14.144	0.000	0.000	-	0.000	-	-	-	-	Continuing	Continuing
600A: <i>CSI - Congressional Special Interests</i>	34.485	2.000	0.000	0.000	-	0.000	-	-	-	-	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 2022 Defense Health Agency **Date:** May 2021

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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Previous President's Budget	69.219	48.672	49.645	-	49.645
Current President's Budget	69.219	48.672	49.645	-	49.645
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: 600A: *CSI - Congressional Special Interests*

Congressional Add: *PC 466 - CSI Core Restoral Medical Program-wide Activities*

Congressional Add Subtotals for Project: 600A

Congressional Add Totals for all Projects

	FY 2020	FY 2021
	2.000	-
	2.000	-
	2.000	-

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency **Date:** May 2021

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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
433A: NMRC Biological Defense Research Directorate (BDRD) (Navy)	20.799	5.163	3.267	3.371	-	3.371	-	-	-	-	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 2020	FY 2021	FY 2022
Title: NMRC Biological Defense Research Directorate (BDRD) (Navy)	5.163	3.267	3.371
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 2021 Plans: Supports 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 2022 Plans: Will support 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 2021 to FY 2022 Increase/Decrease Statement: Increase is due to inflation.			
Accomplishments/Planned Programs Subtotals	5.163	3.267	3.371

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

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
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)

Remarks

D. Acquisition Strategy

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency **Date:** May 2021

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)
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COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
494A: Medical Development (Lab Support) (Navy)	121.210	42.554	45.405	46.274	-	46.274	-	-	-	-	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 2020	FY 2021	FY 2022
Title: Medical Development (Lab Support) (Navy)	42.554	45.405	46.274
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 2021 Plans: Supports 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 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 2021 to FY 2022 Increase/Decrease Statement: Increase is due to inflation.			
Accomplishments/Planned Programs Subtotals	42.554	45.405	46.274

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

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
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)

Remarks

D. Acquisition Strategy

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency										Date: May 2021		
Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0606105DHA / Medical Program-Wide Activities				Project (Number/Name) 305T / USAMRIID IO&T (Army)			
COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
305T: USAMRIID IO&T (Army)	110.118	0.000	0.000	0.000	-	0.000	-	-	-	-	Continuing	Continuing

A. Mission Description and Budget Item Justification

Funding supports the initial outfitting and transition (IO&T) costs associated with military construction (MILCON) for the US Army Medical Research Institute of Infectious Diseases (USAMRIID), Fort Detrick, Maryland.

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

	FY 2020	FY 2021	FY 2022
Title: USAMRIID IO&T (Army)	0.000	-	-
Description: US Army Medical Research Institute of Infectious Diseases in Fort Detrick, Maryland, IO&T costs associated with MILCON.			
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 2022 Defense Health Agency **Date:** May 2021

Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0606105DHA / Medical Program-Wide Activities	Project (Number/Name) 401A / CONUS Laboratory Support Clinical Infrastructure (Army)
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COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
401A: CONUS Laboratory Support Clinical Infrastructure (Army)	38.946	5.358	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 2020	FY 2021	FY 2022
Title: CONUS Laboratory Support Clinical Infrastructure (Army)	5.358	-	-
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	5.358	-	-

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 2022 Defense Health Agency **Date:** May 2021

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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
432A: OCONUS Laboratory Infrastructure Support (Army)	76.403	14.144	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 2020	FY 2021	FY 2022
Title: OCONUS Laboratory Infrastructure Support (Army)	14.144	-	-
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			
	14.144	-	-

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 2022 Defense Health Agency **Date:** May 2021

Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0606105DHA / Medical Program-Wide A <i>ctivities</i>				Project (Number/Name) 600A / CSI - Congressional Special <i>Interests</i>			
COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
600A: <i>CSI - Congressional Special Interests</i>	34.485	2.000	0.000	0.000	-	0.000	-	-	-	-	Continuing	Continuing

A. Mission Description and Budget Item Justification

DHP Congressional Special Interest (CSI) Restoral funding is directed toward core research initiatives in Program Element (PE) 0606105 - Medical Program-Wide Activities. Because of the CSI annual structure, out-year funding is not programmed.

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

	FY 2020	FY 2021
<i>Congressional Add:</i> PC 466 - CSI Core Restoral Medical Program-wide Activities	2.000	-
<i>FY 2020 Accomplishments:</i> CSI Restoral		
Congressional Adds Subtotals	2.000	-

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 2022 Defense Health Agency **Date:** May 2021

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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
Total Program Element	113.416	16.819	17.215	17.619	-	17.619	0.000	0.000	0.000	0.000	Continuing	Continuing
377A: <i>GDF-Medical Products and Capabilities Enhancement Activities</i>	109.698	16.819	17.215	17.619	-	17.619	-	-	-	-	Continuing	Continuing
457A: <i>AF Advanced Technology Development – Rapid Technology Transition</i>	1.336	0.000	0.000	0.000	-	0.000	-	-	-	-	Continuing	Continuing
700A: <i>CSI - Congressional Special Interests</i>	2.382	0.000	0.000	0.000	-	0.000	-	-	-	-	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).

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Exhibit R-2, RDT&E Budget Item Justification: PB 2022 Defense Health Agency	Date: May 2021
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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 0607100DHA I <i>Medical Products and Capabilities Enhancement Activities</i>
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B. Program Change Summary (\$ in Millions)	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Previous President's Budget	16.819	17.215	17.619	-	17.619
Current President's Budget	16.819	17.215	17.619	-	17.619
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	-	-			

Change Summary Explanation

N/A

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency										Date: May 2021		
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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
377A: GDF-Medical Products and Capabilities Enhancement Activities	109.698	16.819	17.215	17.619	-	17.619	-	-	-	-	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 2020	FY 2021	FY 2022
Title: 377A: GDF – Medical Products and Capabilities Enhancement Activities	16.819	17.215	17.619
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 2021 Plans: Funding will be used to modernize and upgrade products through joint testing and evaluation to improve fielding and procurement of medical materiel products. Programs for enhancement include: an assessment of a novel video laryngoscope for far-forward endotracheal intubation; evaluation of markerless-based motion capture technology as a screening tool for musculoskeletal injury; evaluation of a longer-acting sleep aid for military operations; expanding the use of a hemostatic device to control bleeding in wounded areas where a tourniquet cannot be utilized; and enhance a burn navigator application for care of burn patients in an operational setting.			
FY 2022 Plans: FY 2022 plans continue efforts as outlined in FY 2021 and support upgrades necessary to modernize Adenovirus manufacturing obsolescence of fielded medical equipment and devices.			
FY 2021 to FY 2022 Increase/Decrease Statement:			

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency		Date: May 2021
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>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2020	FY 2021	FY 2022
Pricing adjustment for inflation.			
Accomplishments/Planned Programs Subtotals	16.819	17.215	17.619

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.

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency **Date:** May 2021

Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0607100DHA / Medical Products and Capabilities Enhancement Activities	Project (Number/Name) 457A / AF Advanced Technology Development – Rapid Technology Transition
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COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
457A: AF Advanced Technology Development – Rapid Technology Transition	1.336	0.000	0.000	0.000	-	0.000	-	-	-	-	Continuing	Continuing

A. Mission Description and Budget Item Justification

Air Force - Medical Products and Capabilities Enhancement Activities: Funds support a developmental upgrade to a medical product that has been fielded and for which procurement funding is anticipated subsequent fiscal years.

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

	FY 2020	FY 2021	FY 2022
Title: AF Advanced Technology Development – Rapid Technology Transition	0.000	-	-
Description: Provide 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.			
Accomplishments/Planned Programs Subtotals	0.000	-	-

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

N/A

Remarks

\$1.1M FY15/17 Defense Health Program – Air Force Procurement funds

D. Acquisition Strategy

Cost-plus Fixed Fee contract award to performer via the Army-Natick Soldier Systems Research Development and Execution Center contracting activity.

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Health Agency **Date:** May 2021

Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0607100DHA / <i>Medical Products and Capabilities Enhancement Activities</i>	Project (Number/Name) 700A / <i>CSI - Congressional Special Interests</i>
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COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
700A: <i>CSI - Congressional Special Interests</i>	2.382	0.000	0.000	0.000	-	0.000	-	-	-	-	Continuing	Continuing

Note

N/A

A. Mission Description and Budget Item Justification

Congressional Special Interest (CSI) funding directed toward core research initiatives in Program Element (PE) 0607100 - Medical Products and Capabilities Enhancement Activities.

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

N/A

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

N/A

Remarks

N/A

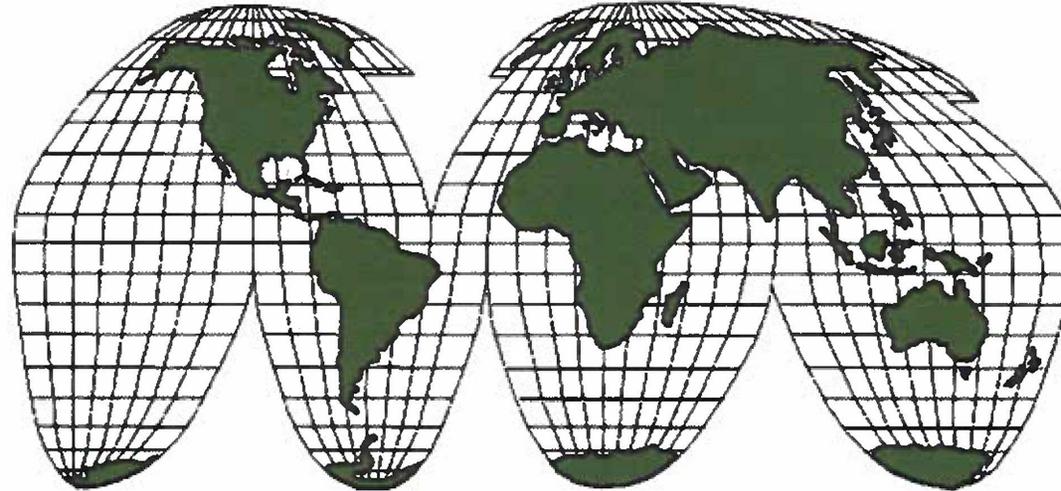
D. Acquisition Strategy

N/A

May 26, 2021

Department of Defense
OFFICE OF PREPUBLICATION AND SECURITY REVIEW

DEFENSE HEALTH PROGRAM



Fiscal Year (FY) 2022 Budget Estimates

DIRECT WAR AND ENDURING COSTS APPENDIX

May 2021

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 \$1,260,000 in FY 2021**

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**Defense Health Program
Direct War and Enduring Requirements
FY 2022 President's Budget Estimates**

<u>Sub-Activity Group</u>	<u>Sub-Activity Group Name</u>	<u>FY 2020 Actuals</u>	<u>FY 2021 Request</u>	<u>FY 2022 Request</u>
1	In House Care	57,248	65,072	-
2	Private Sector Care	287,487	296,828	-
3	Consolidated Health Support	2,800	3,198	-
4	Information Management			
5	Management Activities			
6	Education and Training			
7	Base Operations/Communications			
		347,535	365,098	-

The Defense Health Program's FY 2022 Direct War request is accounted for in the Defense Health Program base budget:

Direct War Costs (\$251,851K): Direct War costs are those combat or direct combat support costs that will not continue to be expended once combat operations end at major contingency locations.

**Defense Health Program
Direct War and Enduring Requirements
FY 2022 Presidents Budget Estimates**

Budget Activity 1, Operation and Maintenance

I. Description of Operations Supported: Provides resources needed to fund the incremental (above baseline) costs to support Operation FREEDOM'S SENTINEL (OFS) in Afghanistan, Operation INHERENT RESOLVE (OIR) in Iraq and the Levant, increasing efforts to support European allies and deter aggression (European Reassurance Initiative), and supporting a partnership-focused approach to counterterrorism. 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 aligned in the Defense Health Program, Operation and Maintenance base budget and supports the following category:

Direct War Costs (\$251,851K): Direct War 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 Public Health and Bioenvironmental Engineering duty sections to continue MTF and base support functions

**Defense Health Program
Direct War and Enduring Requirements
FY 2022 President's Budget Estimates**

II. Financial Summary:

(\$ in Thousands)			
Total DHP OCO:	<u>FY 2020</u> <u>Actuals</u>	<u>FY 2021</u> <u>Request</u>	<u>FY 2022</u> <u>Request</u>
	347,535	365,098	0
OCO for Direct War Costs:	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>
			0

A. Subactivity Group – In-House Care:

(\$ in Thousands)			
	<u>FY 2020</u> <u>Actuals</u>	<u>FY 2021</u> <u>Request</u>	<u>FY 2022</u> <u>Request</u>
	57,248	65,072	0

Narrative Justification: Direct War Costs of \$63,200K is included in the Defense Health Program, Operation and Maintenance, In House Care base budget. 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 to sustain the delivery of patient care in Military Medical Treatment Facilities (MTFs).

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
Direct War and Enduring Requirements
FY 2022 President's Budget Estimates**

A. Subactivity Group – Private Sector Care:

FY 2020	FY 2021	FY 2022
<u>Actuals</u>	<u>Request</u>	<u>Request</u>
287,487	296,828	0

Narrative Justification: Direct War Costs of \$188,223K is accounted for in the Defense Health Program, Operation and Maintenance, Private Sector Care base budget. 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.

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.

**Defense Health Program
Direct War and Enduring Requirements
FY 2022 President's Budget Estimates**

A. Subactivity Group - Consolidated Health Support:

FY 2020	FY 2021	FY 2022
<u>Actuals</u>	<u>Request</u>	<u>Request</u>
2,800	3,198	0

Narrative Justification: Direct War Costs of \$525K are accounted for in the Defense Health Program, Operation and Maintenance, Consolidated Health Support base budget request. Requirements 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.

Impact if not funded: Aeromedical transport missions would require additional internal funding offsets such as delays in infrastructure improvements and equipment or supply procurement.

**Defense Health Program
Direct War and Enduring Requirements
FY 2022 President's Budget Estimates**

<u>Line</u>	<u>(Dollars in Thousands)</u>	<u>CHANGE</u>			<u>CHANGE</u>			
		<u>FY 2020</u> <u>Actuals</u>	<u>Price</u> <u>Growth</u>	<u>Program</u> <u>Growth</u>	<u>FY 2021</u> <u>Request</u>	<u>Price</u> <u>Growth</u>	<u>Program</u> <u>Growth</u>	<u>FY 2022</u> <u>Request</u>
308.1	Travel of Persons	36	1	853	890	18	(908)	-
399	Total Travel	36	1	853	890	18	(908)	-
411	Army Supply	-	-	-	450	17	(467)	-
417	Local Purch Supplies & Mat	-	-	-	46	1	(47)	-
499	Total Supplies & Materials	-	-	-	496	18	(514)	-
502	Army Fund Equipment	-	-	-	658	25	(683)	-
599	Total Equipment Purchases	-	-	-	658	25	(683)	-
601	Army Industrial Operations	-	-	-	153	-	(153)	-
682	Industrial Mob Capacity	-	-	250	250	5	(255)	-
699	Total DWCF Purchases	-	-	250	403	5	(408)	-
706	AMC Channel Passenger	1,345	27	498	1,870	37	(1,907)	-
771	Commercial Transportation	-	-	-	-	-	-	-
799	Total Transportation	1,345	27	498	1,870	37	(1,907)	-
914	Purchased Communications (Non-Fund)	-	-	-	-	-	-	-
915	Rents (Non-GSA)	-	-	-	-	-	-	-
920.1	Supplies & Materials (Non-Fund)	726	15	(741)	-	-	-	-
924	Pharmaceutical Drugs	36,093	1,408	3,490	40,991	1,599	(42,590)	-
925	Equipment Purchases (Non-Fund)	-	-	-	-	-	-	-

**Defense Health Program
Direct War and Enduring Requirements
FY 2022 Presidents Budget Estimates**

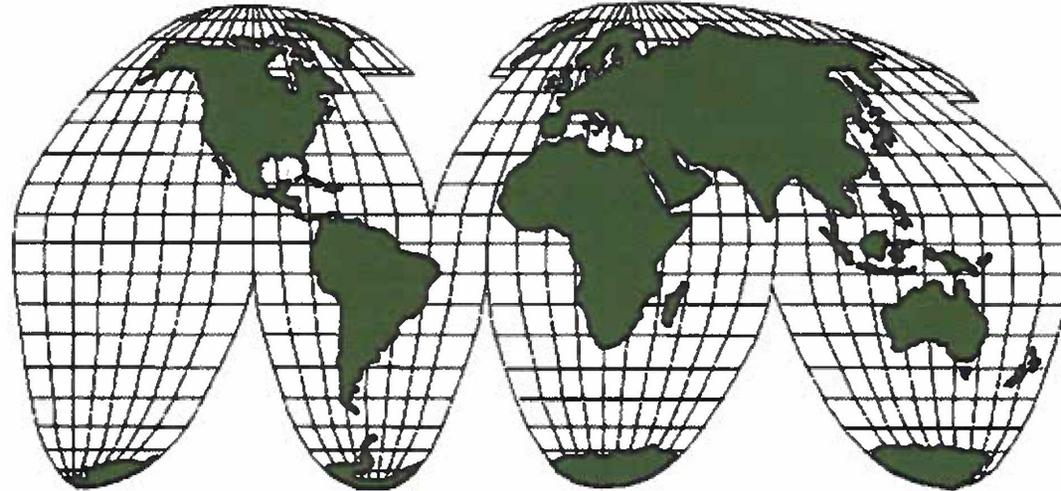
955 Other Costs (Medical Care)	14	1	269	284	11	(295)	-
984 Equipment Contracts	-	-	-	500	10	(510)	-
986 Medical Care Contracts	309,321	12,064	(2,379)	319,006	12,441	(331,447)	-
999 Total Purchases	346,154	13,486	641	360,781	14,061	(374,842)	-
9999 Total	347,535	13,514	2,242	365,098	-	14,165	(379,263)

CLEARED
For Open Publication

May 24, 2021

Department of Defense
OFFICE OF PREPUBLICATION AND SECURITY REVIEW

DEFENSE HEALTH PROGRAM



Fiscal Year (FY) 2022 Budget Estimates

OPERATION AND MAINTENANCE

PROCUREMENT

RESEARCH, DEVELOPMENT, TEST AND EVALUATION

Volume 4: Service's Medical Readiness Activities Exhibits

May 2021

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**

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**Defense Health Program
Fiscal Year (FY) FY 2022 Budget Estimates**

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DEPARTMENT OF THE ARMY
Medical Readiness Activities
Fiscal Year (FY) 2022 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, 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 Information Management/Information Technology programs, authorized civilian workforce performing medical research, laboratory infrastructure and management support for selected U.S. 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.

DEPARTMENT OF THE ARMY
Medical Readiness Activities
Fiscal Year (FY) 2022 President's Budget

Financial Summary:

	FY 2021						FY 2022 Estimate
	<u>FY 2020 Actuals</u>	<u>Budget Request</u>	<u>Congressional Action</u>			<u>Current Estimate</u>	
			<u>Amount</u>	<u>Percent</u>	<u>Appropriated</u>		
TOTAL , BA 01: Operating Forces	0	0	0	0	1,050,167	0	1,102,964
TOTAL , BA 02: Mobilization	0	0	0	0	0	0	0
TOTAL , BA 03: Training and Recruiting	0	0	0	0	0	0	0
TOTAL , BA 04: Admin & Srvwide Activities	0	0	0	0	0	0	0
Total Medical Readiness Activities:	0	0	0	0	1,050,167	0	1,102,964

Details:

BA 01: Operating Forces

Medical Operations Support

2020A	BSS1	Base Operating Support	0	0	0	0	399,497	0	425,594
2020A	1C6C	Combat Support Forces	0	0	0	0	0	0	0
Total Medical Operations Support			0	0	0	0	399,497	0	425,594

Medical Research and Development

2020A	BSS1	Base Operating Support	0	0	0	0	163,032	0	170,756
2020A	1C6C	Combat Support Forces	0	0	0	0	0	0	0
Total Medical Research and Development			0	0	0	0	163,032	0	170,756

Medical Facilities and Installation Support

2020A	BSS1	Base Operating Support	0	0	0	0	190,647	0	196,491
2020A	1C6C	Combat Support Forces	0	0	0	0	0	0	0
Total Medical Facilities and Installation Support			0	0	0	0	190,647	0	196,491

Medical Acquisition Support

2020A	BSS1	Base Operating Support	0	0	0	0	16,368	0	17,537
2020A	1C6C	Combat Support Forces	0	0	0	0	0	0	0
Total Medical Acquisition Support			0	0	0	0	16,368	0	17,537

Medical Education and Training

2020A	BSS1	Base Operating Support	0	0	0	0	280,623	0	292,586
2020A	1C6C	Combat Support Forces	0	0	0	0	0	0	0
Total Medical Education and Training			0	0	0	0	280,623	0	292,586

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

**DEPARTMENT OF THE ARMY
Medical Readiness Activities
Fiscal Year (FY) 2022 President's Budget**

Reconciliation of Increases and Decreases:

FY 2021 Current Estimate.....		\$0
1. Price Change.....		\$3,692
2. Transfers.....		\$0
a) Transfers In.....	\$1,050,167	
1) Medical Readiness.....	\$1,050,167	
Transfers funding and 3,825 FTEs from SAG 121, Force Readiness Operations Support (\$-1,013,058; -3,618 FTEs) and SAG 133, Management and Operational Headquarters (\$-37,109; -207 FTEs) to SAG 124, Medical Readiness to establish a new Subactivity Group providing improved visibility of medical resources following Department of Defense Medical realignments and FY 2021 Defense-wide review. Resources are aligned to the following programs within SAG 124: Medical Operations Support Program (\$399,497; 2,066 FTEs); Medical Research and Development (\$163,032; 191 FTEs); Medical Facilities and Maintenance (\$190,647; 729 FTEs); Medical Acquisition Support (\$16,368; 62 FTEs); and Medical Education and Training (\$280,623; 777 FTEs). (Baseline: \$0; 3,825 FTE)		
b) Transfers Out.....		\$0
1)		\$0
3. Program Increases.....		\$51,248
1) Civilian Average Salary Adjustments.....		\$97
Adjusts funding as a result 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. (Baseline: \$0)		

2) Medical Acquisition Support	\$1,110
Increases funding to provide Information Technology (IT) and administrative support to the Contracting portion of the Medical Logistics mission assumed by the Army in FY 2022. (Baseline: \$0)	
3.) Medical Education and Training Support	\$5,711
Increases funding for travel to provide soldiers required medical readiness training for pre-deployment, Basic Officer Leaders Courses, and Advance Individual Training Courses. (Baseline: \$0)	
4.) Medical Education and Training Support - Scholarship	\$6,396
Increases funding to support 75 additional Health Profession Scholarships to achieve accessions requirements for critical wartime health specialties. (Baseline: \$0)	
5) Medical Facilities and Installation Support	\$5,395
Increases funding for sustainment, restoration, and modernization of non-Medical facilities supporting Medical Readiness. The increase brings funding for these facilities closer in line with the rest of the Army's real property inventory. (Baseline: \$0)	
6) Medical Operational Support	\$16,263
Increases funding for evaluation, validation, and qualification of medical readiness for all Soldiers, and also enhances the mobilization capacity rotational demands and contingency operations for Reserve Component Soldiers by adding additional administrative, operational, and logistical support for Medical Processing at Soldier Readiness Processing Centers. Improves oversight and supervision of medical readiness by supporting system, database administration, and information assurance services for the Medical Operational Data System (MODS), which is the Army's authoritative data source for individual medical readiness. (Baseline: \$0)	
7) Medical Operational Support - Office of Soldier Council	\$9,000
Increases funding for the Office of Soldier's Counsel to provide legal advice and representation to Soldiers undergoing the Army's Disability Evaluation system from the initiation of a Medical Evaluation Board. (Baseline: \$0)	
8) Medical Research	\$7,276

Increases funding for additional medical research laboratory operating and administrative costs at U.S. Army Medical Research and Development Command subordinate laboratories. Effort supports manpower and operating requirements essential to Force Health Protection (soldier immunizations and ration testing programs) and the surveillance of infectious disease outbreaks both in CONUS and OCONUS. These resources are instrumental in the continued research and development of the military's medical requirements in order to maintain the capabilities the Army needs to remain ready and lethal on the battlefield and to allow for modernization through the advancement of military medicine. (Baseline: \$0)

4. Program Decreases.....	(\$2,143)
1) 1) Civilian Workforce Reduction.....	\$-2,143
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. (Baseline: \$0; -17 FTE)	
FY 2022 Budget Request.....	\$1,102,964

DEPARTMENT OF THE ARMY
Medical Readiness Activities
Fiscal Year (FY) 2022 President's Budget

Performance Criteria and Evaluation Summary:

	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>
1) Medical Readiness			
Medically Ready to Deploy ¹	0.00	387,915	449,372
Dentally Ready to Deploy ²	0.00	431,865	452,930
	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>
2) Medical Operations Support			
% Semi-annual Working Dog Physical Exams 180 Days or less	0	≥ 90.0%	≥ 90.0%
% Consolidated Commercial Audit Food Program Performance	0	≥ 90.0%	≥ 90.0%
Optical Fabrication	0	700,000	700,000
	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>
3) Medical Research and Development Laboratories			
Army Medical Research Labs	0	6	6
	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>
4) Medical Facilities and Installation Support			
Facilities Sustainment Square Feet	0	3,414	3,414
	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>
5) Medical Education and Training			
Health Profession Scholarship	0	1,452	1,527
Officer/Enlisted Primary Training	0	7,890	6,254
Other Training - Medical Function Training ¹	0	19,642	22,395

Notes:

1) ¹Medically Ready to Deploy includes all active duty military that are medically cleared to deploy (PHA, immunizations, labs, profiles). Current as of 1 Apr 2021.

²Dentally Ready to Deploy includes all active duty military that are classified as Dental Class 1 or 2. Current as of 1 Apr 2021.

- 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), S Army Institute of Surgical Research (USAISR), US Army Medical Research Institute of Chemical Defense (USAMRICD), US Army Medical Research Institute of Infectious Diseases (USAMRIID), US Army Research Institute of Environmental Medicine (USARIEM), US Army Walter Reed Institute of Research (WRAIR).
- 4)** Facilities 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 regular maintenance tasks, and emergency response and and service calls for minor repairs. It does not resource environmental compliance costs, scheduled adjustments and inspections, preventive facility leases, custodial and grounds services, waste disposal, and utilities.
- 5)** ¹Other Training includes leadership and skills progression courses as well as professional development training.

DEPARTMENT OF THE ARMY
Medical Readiness Activities
Fiscal Year (FY) 2022 President's Budget

Personnel Summary: Total

	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>Change</u> <u>FY 2021/2022</u>
<u>Active Military End Strength (E/S) (Total)</u>	0	0	433	433
Officer	0	0	336	336
Enlisted	0	0	97	97
<u>Active Military Average Strength (A/S) (Total)</u>	0	0	217	217
Officer	0	0	168	168
Enlisted	0	0	49	49
<u>Civilian FTEs (Total)</u>	0	0	3,839	3,839
<u>DIRECT FUNDED (DOES NOT INCLUDE MILITARY TECHNICIANS)</u>	0	0	3,808	3,808
U.S. Direct Hire	0	0	3,588	3,588
Foreign National Direct Hire	0	0	7	7
Total Direct Hire	0	0	3,595	3,595
Foreign National Indirect Hire	0	0	213	213
<u>REIMBURSABLE FUNDED</u>	0	0	31	31
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	31	31
<u>Annual Civilian Salary Cost</u>	0	0	129	129
<u>Contractor FTEs (Total)</u>	0	0	1,819	1,819

DEPARTMENT OF THE ARMY
 Medical Readiness Activities
 Fiscal Year (FY) 2022 President's Budget

OP-32A Line Items: Total

	FY 2020 Program	FC Rate Diff	Price Growth Percent	Price Growth	Program Growth	FY 2021 Program	FC Rate Diff	Price Growth Percent	Price Growth	Program Growth	FY 2022 Program
<u>CIVILIAN PERSONNEL COMPENSATION</u>											
0101	EXECUTIVE, GENERAL AND SPECIAL SCHEDULES							0.00%	3,224	467,249	470,473
0103	WAGE BOARD							0.00%	17	3,627	3,644
0104	FOREIGN NATIONAL DIRECT HIRE (FNDH)							0.00%	0	118	118
0199	TOTAL CIVILIAN PERSONNEL COMPENSATION								3,241	470,994	474,235
<u>TRAVEL</u>											
0308	TRAVEL OF PERSONS							1.90%	0	26,900	26,900
0399	TOTAL TRAVEL								0	26,900	26,900
<u>DEFENSE WORKING CAPITAL FUND SUPPLIES AND MATERIALS</u>											
0416	GSA MANAGED SUPPLIES AND MATERIALS							1.90%	0	1,570	1,570
0422	DLA MATERIEL SUPPLY CHAIN (MEDICAL)							0.20%	0	1,801	1,801
0499	TOTAL SUPPLIES AND MATERIALS PURCHASES								0	3,371	3,371
<u>DEFENSE WORKING CAPITAL FUND EQUIPMENT PURCHASES</u>											
0506	DLA MATERIEL SUPPLY CHAIN (CONSTRUCTION AND EQUIP)							2.20%	0	32,221	32,221
0599	TOTAL STOCK FUND EQUIPMENT PURCHASES								0	32,221	32,221
<u>OTHER PURCHASES</u>											
0901	FOREIGN NATIONAL INDIRECT HIRE (FNIH)						451	0.00%	0	15,043	15,494
0920	SUPPLIES AND MATERIALS (NON-FUND)							1.90%	0	51,266	51,266
0921	PRINTING AND REPRODUCTION							1.90%	0	1,604	1,604
0922	EQUIPMENT MAINTENANCE BY CONTRACT							1.90%	0	14,671	14,671
0923	OPERATION AND MAINTENANCE OF FACILITIES							1.90%	0	51,565	51,565
0924	PHARMACEUTICAL DRUGS							1.90%	0	49,144	49,144
0925	EQUIPMENT PURCHASES (NON-FUND)							1.90%	0	16,292	16,292
0930	OTHER DEPOT MAINTENANCE (NON-FUND)							1.90%	0	174	174
0932	MANAGEMENT AND PROFESSIONAL SUPPORT SERVICES							1.90%	0	19,543	19,543
0933	STUDIES, ANALYSIS, AND EVALUATIONS							1.90%	0	1,000	1,000
0936	TRAINING AND LEADERSHIP DEVELOPMENT (OTHER CONTR)							1.90%	0	4,593	4,593
0955	MEDICAL CARE							1.90%	0	77,526	77,526
0957	LAND AND STRUCTURES							1.90%	0	6,625	6,625
0986	MEDICAL CARE CONTRACTS							1.90%	0	67,338	67,338
0987	OTHER INTRA-GOVERNMENT PURCHASES							1.90%	0	58,234	58,234
0988	GRANTS, SUBSIDIES AND CONTRIBUTIONS							1.90%	0	6,396	6,396
0989	OTHER SERVICES							1.90%	0	62,772	62,772
0990	IT CONTRACT SUPPORT SERVICES							1.90%	0	62,000	62,000
0999	TOTAL OTHER PURCHASES								-	565,786	566,237
9999	GRAND TOTAL						451		3,241	1,099,272	1,102,964

DEPARTMENT OF THE NAVY
Medical Readiness Activities
Fiscal Year (FY) 2022 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: N/A

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.

DEPARTMENT OF THE NAVY
Medical Readiness Activities
Fiscal Year (FY) 2022 President's Budget

Financial Summary:

	FY 2021							FY 2022
	FY 2020	Budget	Congressional Action			Current	FY 2022	
			Actuals	Request	Amount			
TOTAL , BA 01: Operating Forces	0	21,645	-3	-0.01	21,642	21,642	3,923	
TOTAL , BA 02: Mobilization	0	18,611	3,818	20.51	22,429	22,429	24,738	
TOTAL , BA 03: Training and Recruiting	0	117,595	-1,839	-1.56	115,756	115,756	119,418	
TOTAL , BA 04: Admin & Srvwide Activities	0	253,089	-3,143	-1.24	249,946	249,946	343,475	
Total Medical Readiness Activities:	0	410,940	-1,167	-0.28	409,773	409,773	491,554	

Details:

BA 01: Operating Forces

Medical Operations Support

OMN 1804 BSS1 Base Operating Support	0	19,965	0	0	19,965	19,965	0 ¹
Total Medical Operations Support	0	19,965	0	0	19,965	19,965	0

Medical Research and Development

	0	0	0	0	0	0	0
Total Medical Research and Development	0						

Medical Facilities and Installation Support

OMN 1804 BSM1 Sustainment, Restoration and Moderization	0	181	0	0	181	181	0 ¹
Total Medical Facilities and Installation Support	0	181	0	0	181	181	0

Medical Acquisition Support

OMN 1804 BSIT Enterprise Information Technology	0	1,499	-3	-0.20	1,496	1,496	3,923
Total Medical Acquisition Support	0	1,499	-3	-0.20	1,496	1,496	3,923

Medical Education and Training

	0	0	0	0	0	0	0
Total Medical Education and Training	0						

Notes:

1) ¹FY 2021 funding was received under BSS1 and BSM1 due to line limitations. Starting in FY 2022, funding will be received under 4A8M (increase in funding shown in FY 2022 4A8M, BA 04).

**DEPARTMENT OF THE NAVY
Medical Readiness Activities
Fiscal Year (FY) 2022 President's Budget**

<u>Reconciliation of Increases and Decreases:</u>	<u>BSIT</u>
FY 2021 Current Estimate	\$1,496
1. Price Change.....	\$34
2. Transfers.....	\$2,381
a) Transfers In.....	1892
1) Transfers In.....	\$1,892
Transfer In of non-labor costs to fulfill SIPRNET requirements across BUMED from 4A8M.	
b) Transfers Out.....	489
1) Transfer Out.....	\$489
Transfer In of SIPR Civilian Personnel to fulfill SIPRNET requirements across BUMED from 4A8M.	
3. Program Increases.....	\$29
1) Program Increases in FY 2022.....	29
Increase in FERS Employer Contribution.	
4. Program Decreases.....	(\$17)
1) Program Decreases in FY 2022.....	-17
Decrease in Civilian Personnel Compensation is based on the grade mix of personnel in support of Medical Readiness requirements.	
FY 2022 Budget Request	\$3,923

DEPARTMENT OF THE NAVY
Medical Readiness Activities
Fiscal Year (FY) 2022 President's Budget
BSIT

Performance Criteria and Evaluation Summary:

Medical Acquisition Support

FY 2020 FY 2021 FY 2022

Medical Readiness

Expeditionary Medical Support Facilities:

Dollars (\$K)

\$0 \$1,496 \$3,923

Personnel

12 16

	\$0	\$1,496	\$3,923
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GRAND TOTAL

DEPARTMENT OF THE NAVY
 Medical Readiness Activities
 Fiscal Year (FY) 2022 President's Budget

Financial Summary:

	FY 2021						FY 2022 Estimate
	FY 2020 Actuals	Budget Request	Congressional Action			Current Estimate	
			Amount	Percent	Appn		
TOTAL , BA 01: Operating Forces	0	21,645	-3	-0.01	21,642	21,642	3,923
TOTAL , BA 02: Mobilization	0	18,611	3,818	20.51	22,429	22,429	24,738
TOTAL , BA 03: Training and Recruiting	0	117,595	-1,839	-1.56	115,756	115,756	119,418
TOTAL , BA 04: Admin & Srvwide Activities	0	253,089	-3,143	-1.24	249,946	249,946	343,475
Total Medical Readiness Activities:	0	410,940	-1,167	-0.28	409,773	409,773	491,554

Details:

BA 02: Mobilization

Medical Operations Support

OMN 1804 2C1H Expeditionary Health Services	0	18,611	3,818	20.51	22,429	22,429	24,738
Total Medical Operations Support	0	18,611	3,818	20.51	22,429	22,429	24,738

Medical Research and Development

	0	0	0	0	0	0	0
Total Medical Research and Development	0						

Medical Facilities and Installation Support

	0	0	0	0	0	0	0
Total Medical Facilities and Installation Support	0						

Medical Acquisition Support

	0	0	0	0	0	0	0
Total Medical Acquisition Support	0						

Medical Education and Training

	0	0	0	0	0	0	0
Total Medical Education and Training	0						

**DEPARTMENT OF THE NAVY
Medical Readiness Activities
Fiscal Year (FY) 2022 President's Budget**

<u>Reconciliation of Increases and Decreases:</u>	<u>2C1H</u>
FY 2021 Current Estimate.....	\$22,429
1. Price Change.....	\$452
2. Transfers.....	\$2,420
a) Transfers In.....	2420
1) Transfers In.....	\$2,420
Direct War requirement costs were shifted from the Overseas Contingency Operation (OCO) budget to the base budget. Reference PBD 710 OCO-002 Direct War OCO, and OCO DW Restoral.	
b) Transfers Out.....	0
1) Transfer Out.....	\$0
3. Program Increases.....	\$2,627
1) Program Increases in FY 2022.....	2627
Increase in Equipment Purchases is due to a change in the mix of items to be procured based on life cycle replacement of Expeditionary Medical platforms, and transfer in of the Direct War requirement costs that were shifted from the Overseas Contingency Operation (OCO) budget to the base budget. Reference PBD 710 OCO-002 Direct War OCO, and OCO DW Restoral.	
4. Program Decreases.....	(\$3,190)
1) Program Decreases in FY 2022.....	-5
Decrease in fuel is due to the reduced usage of forklifts and other equipment within in the warehouse.	
2) Program Decreases in FY 2022.....	-119
Decrease in Civilian Personnel Compensation is based on the grade mix of personnel supporting Expeditionary Medical programs.	
3) Program Decreases in FY 2022.....	-3066
Decrease in Supplies and Materials is due to a change in the mix of items to be procured based on requirements for Expeditionary Medical platforms.	
FY 2022 Budget Request.....	\$24,738

DEPARTMENT OF THE NAVY
Medical Readiness Activities
Fiscal Year (FY) 2022 President's Budget
2C1H

Performance Criteria and Evaluation Summary:

Medical Operations Support	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>
<u>FLEET HOSPITAL INVENTORY</u>			
Expeditionary Medical Support Facilities:			
Dollars (\$K)	\$0	\$13,955	\$13,490
150-bed units		8	8
Expeditionary Medical Units:			
Dollars (\$K)	\$0	\$4,094	\$4,481
10-bed units		4	4
Total Number of Beds		1,240	1,240
Forward Deployable Preventive Medicine Units (FDPMU):			
Dollars (\$K)	\$0	\$558	\$635
Units		4	4
SUBTOTAL	\$0	\$18,607	\$18,606
<u>USNS MERCY/COMFORT</u>			
Medical Equipment Replacement - Dollars (\$K)	\$0	\$0 ¹	\$3,712
SUBTOTAL	\$0	\$0	\$3,712
<u>BELOW THRESHOLD REPROGRAMMING AND REALIGNMENT REPORTING SYSTEM ACTION FROM OTHER BSOs</u>			
Shipboard Equipment Replacement Program (SERP) - Dollars (\$K)	\$0	\$0 ¹	\$0
Expeditionary Resuscitative Surgical System-Pacific (ERSS-P) - Dollars (\$K)	\$0	\$0	\$0
SUBTOTAL	\$0	\$0	\$0
<u>ADDITIONAL NAVY MEDICAL SUPPORT</u>			
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)	\$0	\$3,822	\$2,420
SUBTOTAL	\$0	\$3,822	\$2,420
GRAND TOTAL	\$0	\$22,429	\$24,738

Notes:

1) ¹Does not include FY 2021 funding received from other BSOs. Funding is not currently part of the BSO18 budget.

DEPARTMENT OF THE NAVY
 Medical Readiness Activities
 Fiscal Year (FY) 2022 President's Budget

Financial Summary:

	FY 2020 <u>Actuals</u>	FY 2021					Current <u>Estimate</u>	FY 2022 <u>Estimate</u>
		Budget <u>Request</u>	Congressional Action					
			<u>Amount</u>	<u>Percent</u>	<u>Appn</u>			
TOTAL , BA 01: Operating Forces	0	21,645	-3	-0.01	21,642	21,642	3,923	
TOTAL , BA 02: Mobilization	0	18,611	3,818	20.51	22,429	22,429	24,738	
TOTAL , BA 03: Training and Recruiting	0	117,595	-1,839	-1.56	115,756	115,756	119,418	
TOTAL , BA 04: Admin & Srvwide Activities	0	253,089	-3,143	-1.24	249,946	249,946	343,475	
Total Medical Readiness Activities:	0	410,940	-1,167	-0.28	409,773	409,773	491,554	

Details:

BA 03: Training and Recruiting

Medical Operations Support

	0	0	0	0	0	0	0
Total Medical Operations Support	0						

Medical Research and Development

	0	0	0	0	0	0	0
Total Medical Research and Development	0						

Medical Facilities and Installation Support

	0	0	0	0	0	0	0
Total Medical Facilities and Installation Support	0						

Medical Acquisition Support

	0	0	0	0	0	0	0
Total Medical Acquisition Support	0						

Medical Education and Training

OMN 1804 3B3K Health Care Precommissioning Professional School	0	82,303	-1,418	-1.72	80,885	80,885	84,398
OMN 1804 3B3K Education and Training - Health Care	0	35,292	-421	-1.19	34,871	34,871	0
OMN 1804 3B3K Education and Training - Medical Readiness	0	0	0	0	0	0	35,020
Total Medical Education and Training	0	117,595	-1,839	-1.56	115,756	115,756	119,418

**DEPARTMENT OF THE NAVY
 Medical Readiness Activities
 Fiscal Year (FY) 2022 President's Budget**

<u>Reconciliation of Increases and Decreases:</u>	<u>3B3K</u>
FY 2021 Current Estimate.....	\$115,756
1. Price Change.....	\$3,695
2. Transfers.....	\$0
a) Transfers In.....	0
1) Transfers In.....	\$0
b) Transfers Out.....	0
1) Transfer Out.....	\$0
3. Program Increases.....	\$1,258
1) Program Increases in FY 2022.....	738
Increase in Other Services due to mix of items to be procured associated with tuition costs.	
2) Program Increases in FY 2022.....	520
Increase for HMTT Course, which is one initiative that focuses on the development of Knowledge, Skills, and Abilities (KSA) in the sustainment of clinical readiness skill sets for the entire expeditionary combat casualty care team and supporting specialties.	
4. Program Decreases.....	(\$1,291)
1) Program Decreases in FY 2022.....	-102
Decrease in Civilian Personnel Compensation is based on the grade mix of personnel supporting Medical Readiness training requirements.	
2) Program Decreases in FY 2022.....	-1189
Decrease in Travel of Persons is based on the planned training schedule.	
FY 2022 Budget Request.....	\$119,418

DEPARTMENT OF THE NAVY
Medical Readiness Activities
Fiscal Year (FY) 2022 President's Budget
3B3K

Performance Criteria and Evaluation Summary:

Medical Education and Training - <i>Student Workload</i>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>
HPSP – Health Professions Scholarship Program	-	1,265	1,265
FAP – Financial Assistance Program	-	33	33
HPLRP – Health Professionals Loan Repayment Program	-	24	24
NCP - Nurse Candidate Program	-	85	85
GME – Graduate Medical Education	-	1,408	1,408
Other Professional Development	-	605	605
Service Specific Training	-	800	800
TOTAL ESTIMATED STUDENTS	-	4,220	4,220

DEPARTMENT OF THE NAVY
Medical Readiness Activities
Fiscal Year (FY) 2022 President's Budget

Financial Summary:

	FY 2021						FY 2022 Estimate
	FY 2020 Actuals	Budget Request	Congressional Action			Current Estimate	
			Amount	Percent	Appn		
TOTAL , BA 01: Operating Forces	0	21,645	-3	-0.01	21,642	21,642	3,923
TOTAL , BA 02: Mobilization	0	18,611	3,818	20.51	22,429	22,429	24,738
TOTAL , BA 03: Training and Recruiting	0	117,595	-1,839	-1.56	115,756	115,756	119,418
TOTAL , BA 04: Admin & Srvwide Activities	0	253,089	-3,143	-1.24	249,946	249,946	343,475
Total Medical Readiness Activities:	0	410,940	-1,167	-0.28	409,773	409,773	491,554

Details:

BA 04: Admin & Srvwide Activities

Medical Operations Support

OMN 1804 4A1M Administration	0	56,342	-1,751	-3.11	54,591	54,591	58,039
OMN 1804 4A8M Medical Activities	0	196,747	-1,392	-0.71	195,355	195,355	285,436
Total Medical Operations Support	0	253,089	-3,143	-1.24	249,946	249,946	343,475

Medical Research and Development

	0	0	0	0	0	0	0
Total Medical Research and Development	0						

Medical Facilities and Installation Support

	0	0	0	0	0	0	0
Total Medical Facilities and Installation Support	0						

Medical Acquisition Support

	0	0	0	0	0	0	0
Total Medical Acquisition Support	0						

Medical Education and Training

	0	0	0	0	0	0	0
Total Medical Education and Training	0						

**DEPARTMENT OF THE NAVY
 Medical Readiness Activities
 Fiscal Year (FY) 2022 President's Budget**

<u>Reconciliation of Increases and Decreases:</u>	<u>4A1M</u>
FY 2021 Current Estimate	\$54,591
1. Price Change.....	\$1,237
2. Transfers.....	\$0
a) Transfers In.....	\$0
1) Tansfers In.....	\$0
b) Transfers Out.....	\$0
1) Transfers Out.....	\$0
3. Program Increases.....	\$2,240
1) Program Increase in FY 2022.....	2240
Increase in FERS Employer Contribution	
4. Program Decreases.....	(\$29)
1) Program Decrease in FY 2022.....	-29
Decrease in Other Intra-Government Purchases due to reduction in housing and medical services related to International Cooperative Administrative Support Services (ICASS).	
FY 2022 Budget Request	\$58,039

DEPARTMENT OF THE NAVY
Medical Readiness Activities
Fiscal Year (FY) 2022 President's Budget
4A1M

Performance Criteria and Evaluation Summary:

Medical Operations Support	(\$K)	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>
International Cooperative Administrative Support (ICASS)		\$0	\$732	\$717
Financial Improvement and Audit Readiness (FIAR)		\$0	\$873	\$923
Medical Headquarters		\$0	\$52,686	\$56,082
DOD Workforce Rationalization Plan Personnel		\$0	\$300	\$317
	TOTAL	\$0	\$54,591	\$58,039

**DEPARTMENT OF THE NAVY
Medical Readiness Activities
Fiscal Year (FY) 2022 President's Budget**

<u>Reconciliation of Increases and Decreases:</u>	<u>4A8M</u>
FY 2021 Current Estimate	\$195,355
1. Price Change.....	\$4,944
2. Transfers.....	\$15,760
a) Transfers In.....	16249
1) Transfers In.....	\$16,249
An additional 166 FTE are being realigned to BUMED from CNIC as part of the PB21 DWR cleanup that transferred Defense Health Program funding to Department of the Navy in support of Medical Readiness.	
b) Transfers Out.....	-489
1) Transfer Out.....	(\$489)
Transfer Out of SIPR Civilian Personnel to fulfill SIPRNET requirements across BUMED to BSIT.	
3. Program Increases.....	\$70,503
1) Program Increases in FY 2022.....	55324
Increase in Other Purchases such as utilities, rents, supplies and materials, equipment, maintenance, management and professional support services, medical care contracts, and other intra-government purchase and services to support efforts providing operational medical support to the fleet surgeons and the force medical officers.	
2) Program Increases in FY 2022.....	12281
Increase in GSA and Local Purchase Managed Supplies and Materials is due to a change in the mix of items to be procured to support enterprise-wide programs with operations throughout Navy Medicine.	
3) Program Increases in FY 2022.....	1905
Increase in GSA Managed Equipment is due to a change in the mix of items to be procured to support enterprise-wide programs with operations throughout Navy Medicine.	
5) Program Increases in FY 2022.....	514
Increase in commercial transportation and travel of persons is in support of the programs that maintain wartime readiness and professional development of mental health specialties.	
4) Program Increases in FY 2022.....	479
Increase due to FERS Agency Contribution.	
4. Program Decreases.....	(\$1,126)
1) Program Decreases in FY 2022.....	-1126
Decrease in Civilian Personnel Compensation is based on the grade mix of personnel supporting Operational Readiness programs.	
FY 2022 Budget Request	\$285,436

DEPARTMENT OF THE NAVY
Medical Readiness Activities
Fiscal Year (FY) 2022 President's Budget
4A8M

Performance Criteria and Evaluation Summary:

Medical Operations Support	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>
Drug Demand Reduction Program – Navy Military Drug Testing			
Navy Specimens Tested	0	710,870	0
Navy Recruit Specimens Tested	0	35,696	0
Marine Corps Specimens Tested	0	512,198	0
Marine Corps Recruit Specimens Tested	0	22,314	0
Army Specimens Tested	0	55,146	0
Army Reserves Specimens Tested	0	56,168	0
Army National Guard Specimens Tested	0	52,664	0
Air Force Specimens Tested	0	0	0
Air Force Reserve Specimens Tested	0	0	0
Air National Guard Specimens Tested	0	4	0
Military Entrance Processing Station Specimens Tested	0	277,832	0
Non DOD Specimens Tested	0	0	0
US Coast Guard Specimens Tested	0	72	0
TOTAL SPECIMENS TESTED	0	1,722,964	0
Operational Readiness Programs	(\$K)		
Operational Medicine	\$0	\$26,975	\$42,767
Force Medical Readiness	\$0	\$79,367	\$93,767
Fleet Program	\$0	\$13,367	\$20,767
Operational Health Informatics	\$0	\$40,367	\$52,395
Enterprise Operations	\$0	\$7,367	\$28,029
Industrial Operations	\$0	\$16,750	\$28,150
Navy Readiness Reporting and Preparedness	\$0	\$11,162	\$19,561
TOTAL	\$0	\$195,355	\$285,436

DEPARTMENT OF THE NAVY
Medical Readiness Activities
Fiscal Year (FY) 2022 President's Budget

Personnel Summary: Total

	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>Change</u> <u>FY 2021/2022</u>	
<u>Active Military End Strength (E/S) (Total)</u>	0	0	0	0	0
Officer	0	0	0	0	0
Enlisted	0	0	0	0	0
<u>Active Military Average Strength (A/S) (Total)</u>	0	0	0	0	0
Officer	0	0	0	0	0
Enlisted	0	0	0	0	0
<u>Civilian FTEs (Total)</u>					
<u>DIRECT FUNDED (DOES NOT INCLUDE MILITARY TECHNICIANS)</u>					
U.S. Direct Hire	0	698	699	1	1
Foreign National Direct Hire	0	2	2	0	0
Total Direct Hire	0	700	701	1	1
Foreign National Indirect Hire	0	0	0	0	0
<u>REIMBURSABLE FUNDED</u>					
U.S. Direct Hire	0	0	163	163	163
Foreign National Direct Hire	0	0	0	0	0
Total Direct Hire	0	0	163	163	163
Foreign National Indirect Hire	0	0	0	0	0
<u>Annual Civilian Salary Cost</u>	0	103.25	104.35	1.1	1.1
<u>Contractor FTEs (Total)</u>	0	0	0	0	0

DEPARTMENT OF THE NAVY
Medical Readiness Activities
Fiscal Year (FY) 2022 President's Budget

OP-32A Line Items: Total

(LINE ITEMS INCLUDED: 2C1H, 3B3K, 4A1M, 4A8M, BSIT)		FY 2020	FC Rate	Price	Price	Program	FY 2021	FC Rate	Price	Price	Program	FY 2022
		Program	Diff	Growth	Growth	Growth	Program	Diff	Growth	Growth	Growth	Program
<u>CIVILIAN PERSONNEL COMPENSATION</u>												
0101	EXECUTIVE, GENERAL AND SPECIAL SCHEDULES	68,715	-	-	1,058	41,706	111,479	-	-	2,530	17,632	131,641
0104	FOREIGN NATIONAL DIRECT HIRE (FNDH)	-	-	-	-	47	47	-	-	1	1	49
<u>TRAVEL</u>												
0308	TRAVEL OF PERSONS	461	-	-	8	8,895	9,364	-	-	179	617	10,160
<u>DEFENSE WORKING CAPITAL FUND SUPPLIES AND MATERIALS</u>												
0416	GSA MANAGED SUPPLIES AND MATERIALS	-	-	-	-	363	363	-	-	7	1,958	2,328
0417	LOCAL PURCHASE MANAGED SUPPLIES & MATERIALS	-	-	-	-	20,734	20,734	-	-	394	10,323	31,451
0422	DLA MATERIEL SUPPLY CHAIN (MEDICAL)	-	-	-	-	327	327	-	-	1	(328)	-
<u>DEFENSE WORKING CAPITAL FUND EQUIPMENT PURCHASES</u>												
0507	GSA MANAGED EQUIPMENT	-	-	-	-	120	120	-	-	2	1,905	2,027
<u>Other WORKING CAPITAL FUND PURCHASES (EXCL TRANSPORTATION)</u>												
0671	DISN SUBSCRIPTION SERVICES (DSS)	-	-	-	-	3	3	-	-	-	-	3
0675	DLA DISPOSITION SERVICES	-	-	-	-	1	1	-	-	-	-	1
0679	COST REIMBURSABLE PURCHASES	-	-	-	-	1	1	-	-	-	-	1
<u>TRANSPORTATION</u>												
0706	AMC CHANNEL PASSENGER	-	-	-	-	827	827	-	-	16	(843)	-
0771	COMMERCIAL TRANSPORTATION	474	-	-	8	2,569	3,051	-	-	58	17	3,126
<u>OTHER PURCHASES</u>												
0913	PURCHASED UTILITIES (NON-FUND)	335	-	-	6	(291)	50	-	-	1	407	458
0914	PURCHASED COMMUNICATIONS (NON-FUND)	-	-	-	-	12	12	-	-	-	-	12
0915	RENTS (NON-GSA)	93	-	-	2	529	624	-	-	12	6	642
0920	SUPPLIES & MATERIALS (NON-FUND)	12,582	-	-	227	(9,683)	3,126	-	-	60	5,873	9,059
0921	PRINTING & REPRODUCTION	80	-	-	1	(71)	10	-	-	-	283	293
0922	EQUIPMENT MAINTENANCE BY CONTRACT	4,535	-	-	82	(4,520)	97	-	-	2	7,596	7,695
0923	FACILITY SUSTAINMENT, RESTORATION, AND MODERNIZATION BY CONTRACT	6,454	-	-	117	(2,001)	4,570	-	-	87	375	5,032
0924	PHARMACEUTICAL DRUGS	-	-	-	-	588	588	-	-	22	-	610
0925	EQUIPMENT PURCHASES (NON-FUND)	9,773	-	-	175	47,443	57,391	-	-	1,090	18,499	76,980
0932	MANAGEMENT & PROFESSIONAL SUPPORT SERVICES	-	-	-	-	153	153	-	-	3	1,812	1,968
0933	STUDIES, ANALYSIS, & EVALUATIONS	-	-	-	-	11,259	11,259	-	-	214	6,420	17,893
0935	TRAINING AND LEADERSHIP DEVELOPMENT	-	-	-	-	789	789	-	-	15	(804)	-
0937	LOCALLY PURCHASED FUEL (NON-FUND)	-	-	-	-	29	29	-	-	3	(5)	27
0955	MEDICAL CARE	-	-	-	-	126,788	126,788	-	-	4,691	7,588	139,067
0986	MEDICAL CARE CONTRACTS	1,165	-	-	33	13,036	14,234	-	-	527	5,895	20,656
0987	OTHER INTRA-GOVERNMENT PURCHASES	2,202	-	-	40	(157)	2,084	-	-	40	2,814	4,938
0989	OTHER SERVICES	884	-	-	16	20,606	21,506	-	-	408	3,523	25,437
GRAND TOTAL		107,753	-	-	1,773	280,102	389,627	-	-	10,363	91,564	491,554

DEPARTMENT OF THE AIR FORCE
Medical Readiness Activities
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Description of Operations Financed:

MEDICAL READINESS: N/A

MEDICAL OPERATIONS SUPPORT: 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 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.

DEPARTMENT OF THE AIR FORCE
 Medical Readiness Activities
 Fiscal Year (FY) 2022 President's Budget

Financial Summary:

	FY 2021							FY 2022 <u>Estimate</u>
	FY 2020 <u>Actuals</u>	Budget <u>Request</u>	<u>Congressional Action</u>			Current <u>Estimate</u>		
			<u>Amount</u>	<u>Percent</u>	<u>Appropriated</u>			
TOTAL , BA 01: Operating Forces	0	0	0	0	0	0	0	0
TOTAL , BA 02: Mobilization	0	468,758	0	0	468,758	468,758	\$	427,276
TOTAL , BA 03: Training and Recruiting	0	0	0	0	0	0		0
TOTAL , BA 04: Admin & Srwide Activities	0	0	0	0	0	0		0
Total Medical Readiness Activities:	0	0	0	0	0	0		0
<u>Details:</u>								
<u>BA 02: Mobilization</u>								
<u>Medical Operations Support</u>								
SAG 21D Mobilization Preparedness	0	468,758	0	0	468,758	468,758		277,761
Total Medical Operations Support	0	468,758	0	0	468,758	468,758		277,761
<u>Medical Research and Development</u>								
	0	0	0	0	0	0		0
Total Medical Research and Development	0	0	0	0	0	0		0
<u>Medical Facilities and Installation Support</u>								
	0	0	0	0	0	0		0
Total Medical Facilities and Installation Support	0	0	0	0	0	0		0
<u>Medical Acquisition Support</u>								
	0	0	0	0	0	0		0
Total Medical Acquisition Support	0	0	0	0	0	0		0
<u>Medical Education and Training</u>								
SAG 21D Mobilization Preparedness	0	0	0	0	0	0		149,515
Total Medical Education and Training	0	0	0	0	0	0		149,515

Notes:

Medical Readiness was transferred to the Air Force in FY 2021 therefore there are no actuals to report for 2020.

DEPARTMENT OF THE AIR FORCE
Medical Readiness Activities
Fiscal Year (FY) 2022 President's Budget

Reconciliation of Increases and Decreases:

FY 2021 Current Estimate	\$468,758
1. Price Change.....	\$9,073
2. Transfers.....	\$0
a) Transfers In.....	
b) Transfers Out.....	
3. Program Increases.....	\$13,925
1) Internal realignment within SAG 21D.....	\$0
Internal realignment within the Subactivity Group to properly align funding from Medical Operations Support to Medical Education and Training. There is no impact to Op32 lines. Medical Education and Training +\$149,515 Medical Operations Support -\$149,515	
2) Civilian Pay - Programming Correction.....	\$13,925
Increase reflects a reassessment of program requirements related to the FY 2021 \$423 million Medical Readiness transfer from the Defense Health Agency (DHA) to the U.S. Air Force.	
4. Program Decreases.....	(\$64,480)
1) Medical Readiness - Program Correction.....	(\$58,711)
Decrease reflects a reassessment of program requirements related to the FY 2021 \$423 million Medical Readiness transfer from the Defense Health Agency (DHA) to the U.S. Air Force.	
2) Medical Readiness	(\$5,769)
Decrease will result in the service assuming efficiencies in supply and equipment in the operation support and education and training requirements to protect vital readiness support.	
FY 2022 Budget Request	\$427,276

DEPARTMENT OF THE AIR FORCE
Medical Readiness Activities
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Performance Criteria and Evaluation Summary:

	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>
1) Medical Readiness			
Medically Ready to Deploy ¹	0	279,816	283,925
Dentally Ready to Deploy ²	0	321,021	322,035
	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>
2) Medical Education and Training			
Health Profession Scholarship	1,475	1,443	1,443
Officer/Enlisted Primary Training	0	0	0
Other Training - Medical Function Training ¹	0	9,221	11,353

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) ¹Other Training includes leadership and skills progression courses as well as professional development training.

DEPARTMENT OF THE AIR FORCE
Medical Readiness Activities
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Personnel Summary: Total

	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>Change</u> <u>FY 2021/2022</u>	
<u>Active Military End Strength (E/S) (Total)</u>	0	0	0	0	0
Officer	0	0	0	0	0
Enlisted	0	0	0	0	0
<u>Active Military Average Strength (A/S) (Total)</u>	0	0	0	0	0
Officer	0	0	0	0	0
Enlisted	0	0	0	0	0
<u>Civilian FTEs (Total)</u>	70	595	577	-18	-18
<u>DIRECT FUNDED (DOES NOT INCLUDE MILITARY TECHNICIANS)</u>	70	595	577	-18	-18
U.S. Direct Hire	65	595	577	-18	-18
Foreign National Direct Hire	5	0	0	0	0
Total Direct Hire	70	595	577	-18	-18
Foreign National Indirect Hire	0	0	0	0	0
<u>REIMBURSABLE FUNDED</u>	0	0	0	0	0
U.S. Direct Hire	0	0	0	0	0
Foreign National Direct Hire	0	0	0	0	0
Total Direct Hire	0	0	0	0	0
Foreign National Indirect Hire	0	0	0	0	0
<u>Annual Civilian Salary Cost</u>	205	104	105	1	1
<u>Contractor FTEs (Total)</u>	0	0	0	0	0

DEPARTMENT OF THE AIR FORCE
 Medical Readiness Activities
 Fiscal Year (FY) 2022 President's Budget

OP-32A Line Items: Total

	FY 2020	FC Rate	Price	Price	Program	FY 2021	FC Rate	Price	Price	Program	FY 2022
	<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>	\$ -	\$ -	0.0%	\$ -	\$ 44,953	\$ 44,953	\$ -	2.3%	\$ 1,020	\$ 13,967	\$ 59,940
0101 EXECUTIVE, GENERAL AND SPECIAL SCHEDULES											
0103 WAGE BOARD											
0104 FOREIGN NATIONAL DIRECT HIRE (FNDH)											
0110 UNEMPLOYMENT COMPENSATION	\$ -	\$ -	0.0%	\$ -	\$ 41	\$ 41	\$ -	2.3%	\$ 1	\$ (42)	\$ -
0199 TOTAL CIVILIAN PERSONNEL COMPENSATION	\$ -	\$ -		\$ -	\$ 44,994	\$ 44,994	\$ -		\$ 1,021	\$ 13,925	\$ 59,940
<u>TRAVEL</u>											
0308 TRAVEL OF PERSONS											
0399 TOTAL TRAVEL	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -
<u>DEFENSE WORKING CAPITAL FUND SUPPLIES AND MATERIALS</u>											
0416 GSA MANAGED SUPPLIES AND MATERIALS											
0422 DLA MATERIEL SUPPLY CHAIN (MEDICAL)											
0499 TOTAL SUPPLIES AND MATERIALS PURCHASES	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -
<u>DEFENSE WORKING CAPITAL FUND EQUIPMENT PURCHASES</u>											
0506 DLA MATERIEL SUPPLY CHAIN (CONSTRUCTION AND EQUIP)											
0599 TOTAL STOCK FUND EQUIPMENT PURCHASES	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -
<u>OTHER PURCHASES</u>											
0901 FOREIGN NATIONAL INDIRECT HIRE (FNIH)											
0920 SUPPLIES AND MATERIALS (NON-FUND)											
0921 PRINTING AND REPRODUCTION											
0922 EQUIPMENT MAINTENANCE BY CONTRACT											
0923 OPERATION AND MAINTENANCE OF FACILITIES											
0924 PHARMACEUTICAL DRUGS											
0925 EQUIPMENT PURCHASES (NON-FUND)											
0930 OTHER DEPOT MAINTENANCE (NON-FUND)											
0932 MANAGEMENT AND PROFESSIONAL SUPPORT SERVICES											
0935 TRAINING AND LEADERSHIP DEVELOPMENT	\$ -	\$ -	0.0%	\$ -	\$ 423,764	\$ 423,764	\$ -	1.9%	\$ 8,052	\$ (64,480)	\$ 367,336
0936 TRAINING AND LEADERSHIP DEVELOPMENT (OTHER CONTR)											
0955 MEDICAL CARE											
0957 LAND AND STRUCTURES											
0986 MEDICAL CARE CONTRACTS											
0987 OTHER INTRA-GOVERNMENT PURCHASES											
0989 OTHER SERVICES											
0990 IT CONTRACT SUPPORT SERVICES											
0999 TOTAL OTHER PURCHASES	\$ -	\$ -		\$ -	\$ 423,764	\$ 423,764	\$ -		\$ 8,052	\$ (64,480)	\$ 367,336
9999 GRAND TOTAL	\$ -	\$ -		\$ -	\$ 468,758	\$ 468,758	\$ -		\$ 9,073	\$ (50,555)	\$ 427,276