

Defense Health Program
Fiscal Year (FY) 2007 Budget Estimates
Exhibit R-2, DHP Budget Item Justification

Date: January 2006
R-1 Item Nomenclature: 1
In-House Laboratory Independent Research (ILIR)-
0601101HP

Appropriation/Budget Activity
Defense Health Program/BA-2

COST (\$ in Millions)	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
	<u>Actual</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>
Total PE 0601101HP Cost (ILIR)	0.000	2.355	2.424	2.213	2.259	2.304	2.350
	0.000	2.355	2.424	2.213	2.259	2.304	2.350

A. Mission Description and Budget Item Justification:

This program element supports basic medical research at the Uniformed Services University of the Health Sciences (USUHS) and provides the only programmed research funds received by the University. 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 in order to secure research funds from extramural sources (estimated \$25-\$30 million annually). Eighty to 100 intramural research projects are active each year, including 20-25 new starts. Projects are funded on a peer-reviewed, competitive basis. Results from these studies contribute to the fund of knowledge intended to enable technical approaches and investment strategies within Defense Science and Technology (S&T) programs.

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 (CCC), Infectious Diseases (ID), and Military Operational Medicine (MOM). The portfolio of research projects will vary annually because this research is investigator-initiated. Examples of typical research efforts are:

Combat Casualty Care: Ischemia and reperfusion injury, traumatic brain and peripheral nerve injury, neural control of pain, endotoxic shock, cryotherapy, malignant hyperthermia, inflammation, and wound healing.

Infectious Diseases: Immunology and molecular biology of bacterial, viral and parasitic disease threats to military operations. These threats include scrub typhus; E. coli and their shiga toxins; HIV, HTLV-1, strongyloides, gonorrhea, streptococcus, staphylococcus, hepatitis A, helicobacter pylori, typhoid, malaria, and bartonellosis.

Military Operational Medicine: Sustainment of individual performance; mapping and managing deployment and operational stressors; cognitive enhancement; and military & medical training readiness.

B. Program Change Summary:

COST (\$ in Millions)	FY 2005	FY 2006	FY 2007
	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>
FY07 Budget Estimates Submission RDT&E	0.000	2.379	2.424
FY07 President's Budget Submission RDT&E	0.000	2.355	2.424
Total Adjustments	0.000	-0.024	0.000
Congressional Program actions			
Congressional rescissions		-0.024	
Congressional increases			
Reprogramming			
SBIR/STTR Transfer			
Internal Transfer			

NOTE: Program transfers effective FY 2006 from RDT&E Defense Agencies, Budget Activity 3, Program Element 0601101D8Z to RDT&E Defense Health Program, Budget Activity 2, Program Element 0601101HP.

C. Other Program Funding Summary: Not applicable.

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Date: January 2006
R-1 Item Nomenclature: 1
In-House Laboratory Independent Research (ILIR)
PE 0601101HP (Continued)

Appropriation/Budget Activity
Defense Health Program/BA-2

D. Acquisition Strategy: Not applicable.

E. Program Accomplishments and Plan:
Project Number and Title: ILIR/101HP

FY 2005 Accomplishments

Not applicable. In FY 2005, ILIR research at the Uniformed Services University for the Health Sciences was funded through the Office of Naval Research (PE 0601152N).

FY 2006 Plans

Infectious Diseases: Representative projects will include epidemiological studies of scrub typhus in the Republic of Maldives; a study of the pathology of infectious diarrhea in monkeys; several studies on leishmaniasis, including transmittal vectors and autosomal resistance mechanisms; an investigation of shigella virulence; analysis of the shiga toxins of E. coli; and several studies of the cellular mechanisms of influenza, malaria, and H. pylori.

These projects all supported the essential military mission by advancing our understanding both the transmission and the internal mechanisms of a spectrum of pernicious and/or common diseases that may be faced by warfighters both at home and abroad. In turn, that understanding opens avenues to better control, diagnosis, and treatment of both natural and manmade biological threats. (\$0.333 million)

Military Operational Medicine: Representative projects include the following: An exploration of electrochemical processes in the amygdale, which has partially characterized a mechanism that appears important in the formation and consolidation of emotional memory, will proceed to identify possible mechanisms to protect against adrenergic impairment induced by traumatic stress. A examination of the effects of stress on the suppression of the immune system will include examination of genetic factors that may affect the level and specific nature of impairment. An ongoing rat study of the relations among stress, nicotine, and the effects of using other drugs will investigate effects specific to three common psychiatric illnesses, with special attention to the effects of gender differences. Several projects will investigate mechanisms of the brain to uncover potential enhancement and protection strategies against neurological damage from stress, neurochemicals, and other potential weapons or environmental factors.

These studies support the essential military mission by increasing our understanding of and ability to manipulate the physiological mechanisms of stress and immunity, human sleep and seasonal cycles, and neurological changes necessary to short- and long-term memory. Their discoveries should enable warfighters to stay awake longer with fewer detriments to performance; lead to better strategies for enhancing and preserving memory and reasoning capabilities under battle conditions; help understand and ultimately prevent and treat neuropsychiatric illnesses such as depression and Post Traumatic Stress Disorder (PTSD); and assist deployed troops and their families better prepare for and contend with common, significant stressors. (\$1.012 million)

Combat Casualty Care: Representative studies include an ongoing investigation of signal transduction that has now identified two antibodies pinpointing the mu opioid receptor in the brain, an essential step to understanding the mechanism of opiate effects on pain relief and neural functioning. A family of controlled studies of individuals susceptible to malignant hyperthermia (MH) will pursue genetic markers; new, noninvasive diagnostic tests; and a lactate-based mechanism that may explain the sudden, severe symptoms, similar to heat stroke, that such individuals can experience under physical stress. Two studies of traumatic brain injury will look at different means of protecting against further, permanent damage post-injury. A study of ischemia will look for protective mechanisms against further injury post-wounding.

These studies support the essential military mission by further exploring the mechanism of pain control for an established treatment; providing the groundwork for effective treatments to limit nerve damage and encourage regeneration; and identifying a possible cause of life-threatening complications of the combination of exertion and injury common under heavy battle conditions. (\$1.014 million)

FY 2007 Plans

Efforts will continue in all of USUHS' major research areas (CCC, ID, and MOM) in FY 2007. Specific investigator-initiated projects compete for funding each year, usually with two-year project periods. Therefore, no detailed description of the research is possible at this time. (\$2.424million)

Defense Health Program
Fiscal Year (FY) 2007 Budget Estimates
Exhibit R-2, DHP Budget Item Justification

Date: January 2006
R-1 Item Nomenclature: 2
Medical Technology (AFRRI) - 0602787HP

Appropriation/Budget Activity
Defense Health Program/BA-2

COST (\$ in Millions)	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
	<u>Actual</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>
Total PE 0602787HP Cost	0.000	3.134	3.236	3.306	3.381	3.417	3.553
Medical Technology/P505 Subtotal Cost	0.000	3.134	3.236	3.306	3.381	3.417	3.553

A. Mission Description and Budget Item Justification:

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 mitigating the health consequences from exposures to ionizing radiation that represent the highest probable threat to U.S. forces under current tactical, humanitarian and counter-terrorism 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. Advancements in field-based biological dose assessment systems to measure radiation exposures will enhance triage, treatment decisions and risk assessment. Accurate models to predict casualties will promote effective command decisions and force structure planning to ensure mission success.

The program has three primary goals: (1) rational development of prophylactic and therapeutic strategies based on fundamental knowledge of radiation-induced path physiology and on leveraging advances in medicine and biotechnology from industry and academia; (2) development of novel biological markers and delivery for rapid, field-based individual dose assessment; and (3) understanding toxic consequences from exposure to internal contamination from isotopes such as uranium.

B. Program Change Summary:

COST (\$ in Millions)	FY 2005	FY 2006	FY 2007
	<u>Actual</u>	<u>Estimate</u>	<u>Estimate</u>
FY07 Budget Estimates Submission RDT&E	0.000	3.166	3.236
FY07 President's Budget Submission RDT&E	0.000	3.134	3.236
Total Adjustments	0.000	-0.032	0.000
Congressional Program actions			
Congressional rescissions		-0.032	
Congressional increases			
Reprogramming	0.000	0.000	0.000
SBIR/STTR Transfer			
Internal Transfer			

NOTE: Program transfers effective FY 2006 from RDT&E Defense Agencies, Budget Activity 3, Program Element 0602787D8Z to RDT&E Defense Health Program, Budget Activity 2, Program Element 0602787HP.

C. Other Program Funding Summary: Not applicable.

D. Acquisition Strategy: Not applicable.

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Date: January 2006
R-1 Item Nomenclature: 2
Medical Technology (AFRRI) - 0602787HP
(Continued)

Appropriation/Budget Activity
Defense Health Program/BA-2

E. Program Accomplishments and Plan:

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 ionizing radiation.

FY 2005 Accomplishments: To address the FDA requirements for an understanding of the mechanisms responsible for 5-AED's radioprotective actions, demonstrated that 5-AED modulates the spleen levels of several cytokines, which mediate signals of the immune system.

By FY 2006 identify at least 6 drugs or therapeutic approaches that are promising for treatment of radiation injury.

By FY 2008 identify at least 2 new biosimetric approaches to determine individual radiation exposure.

By FY 2010 develop decision criteria for antibiotic use after radiation injury.

**Defense Health Program
Fiscal Year (FY) 2007 Budget Estimates
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Date: January 2006
R-1 Item Nomenclature: 3
Medical Advanced Technology (AFRRI) -
0603002HP

Appropriation/Budget Activity
Defense Health Program/BA-2

COST (\$ in Millions)	FY 2005 <u>Actual</u>	FY 2006 <u>Estimate</u>	FY 2007 <u>Estimate</u>	FY 2008 <u>Estimate</u>	FY 2009 <u>Estimate</u>	FY 2010 <u>Estimate</u>	FY 2011 <u>Estimate</u>
Total PE 0603002HP Cost	0.000	1.963	0.799	0.817	0.836	0.737	0.752
Medical Advanced Technology (AFRRI)	0.000	0.775	0.799	0.817	0.836	0.737	0.752
Inositol Signaling Molecular-Based Radioprotectant Drug Development		1.188					

A. Mission Description and Budget Item Justification:

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 0602787D, 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 that represent the highest probable threat to US forces under current tactical, humanitarian and counter terrorism mission environments. Findings from basic and developmental research are integrated into highly 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 dose assessment; and (3) experimental data needed to build accurate models for predicting casualties from complex injuries involving radiation and other battlefield insults. The Armed Forces Radiobiology Research Institute (AFRRI), because of its multidisciplinary staff and exceptional laboratory and radiation facilities, is uniquely positioned to execute the program as prescribed by its mission. Because national laboratories operated by the Department of Energy no longer support advanced research relevant to military medical radiobiology, AFRRI is currently the only national resource carrying out this mission.

B. Program Change Summary:

COST (\$ in Millions)	FY 2005 <u>Actual</u>	FY 2006 <u>Estimate</u>	FY 2007 <u>Estimate</u>
FY07 Budget Estimates Submission RDT&E	0.000	0.783	0.799
FY07 President's Budget Submission RDT&E	0.000	1.963	0.799
Total Adjustments	0.000	1.180	0.000
Congressional Program actions			
Congressional rescissions		-0.020	
Congressional increases		1.200	
Reprogramming			
SBIR/STTR Transfer			
Internal Transfer			

NOTE: Program transfers effective FY 2006 from RDT&E Defense Agencies, Budget Activity 3, Program Element 0603002D8Z to RDT&E Defense Health Program, Budget Activity 2, Program Element 0603002HP.

C. Other Program Funding Summary: Not applicable.

D. Acquisition Strategy: Not applicable.

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Date: January 2006
R-1 Item Nomenclature: 3
Medical Advanced Technology (AFRRI) -
0603002HP (Continued)

Appropriation/Budget Activity
Defense Health Program/BA-2

E. Program Accomplishments and Plan:

- By FY 2005 obtain "investigational new drug" status for a therapeutic agent to mitigate radiation injury.
- By FY 2006 provide software tools for biodosimetric assessment.
- By FY 2010 transition 4 new drugs for FDA approval for treatment of radiation injury.
- By FY 2010 provide forward-fieldable biodosimetric tools.

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Date: January 2006
R-1 Item Nomenclature: 4
Biomedical Technology - 0602115HP

Appropriation/Budget Activity
Defense Health Program/BA-2

COST (\$ in Millions)	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
	<u>Actual</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>
Total PE Cost	0.000	2.970	3.000	3.000	3.000	3.000	3.000
Clinical Research Program				0.800	0.800	0.800	0.800
Epidemic Outbreak Surveillance		2.970	3.000	1.000	1.000	1.000	1.000
Medical Modernization Programs				1.200	1.200	1.200	1.200

A. Mission Description and Budget Item Justification:

The Air Force Medical Service has realigned Defense Health Program (DHP), Operation and Maintenance funding to the DHP, Research, Development, Test and evaluation (RDT&E) appropriation in Fiscal Year (FY) 2006 and out. The RDT&E program supports the Air Force Surgeon General's (AFSG's) vision for medical modernization as stated in the US Air Force Medical Service FY 06 - 11 Medical Annual Planning and Programming Guidance, July 29, 2003. This action also supports the capabilities and objectives outlined in the AFMS Concept document for medical modernization in the areas of 1) Ensure a Fit and Healthy Force; 2) Prevent Casualties; 3) Restore Health; 4) Enhance Human Performance. Specific examples of validated Surgeon General's Requirements for Operational Capabilities Council (SGROCC) initiatives within the CONOPS areas include: Epidemic Outbreak Surveillance (EOS) and Clinical Research Program. Specific examples of validated SGROCC new initiatives include: Supervision, Transcutaneous Blood Analyzer, Development of Field-Deployable Cardiopulmonary Support Device, Micro array Automation/Gene Expression, and Genetic, Genomic, and Proteomics to Improve Clinical Care.

The Texas Research Institute for Environmental Studies and AFIERA partnered in a joint environmental research program to address environmental health issues facing the southwest border region of the U.S. and DoD industrial facilities. Clinical Research promotes and conducts biomedical research for general medical education in support of aerospace expeditionary operations and military families at 9 research sites to include 3 active animal laboratories, monitoring the adequate protection of the rights of human subjects and the safety of all subjects involved in clinical investigations and the quality and integrity of the resulting data submitted to the FDA.

Epidemic Outbreak Surveillance (EOS) is an integrated system to accelerate informed decisions involving infectious diseases. FY 02 - FY 04 research funding (>\$10M) was received from the Defense Threat Reduction Agency and Line Air Force for applied research and development. In FY 05 DoD is planning to provide \$5M under the Advanced Concepts Technology Demonstration program. DHP RDT&E funding is used to effectively continue the necessary medical research and application to design and improve genomic biotechnology aimed to transition into the AFMS. Program will work to evaluate the feasibility of the ACDT concept toward application for AFMS biotechnology and use for operational medicine.

Clinical Research Program promotes/conducts biomedical research and medical education in support of aerospace expeditionary operations and military families and ensures protection of subjects when participating in research projects. Funding for applied research focused toward specific physical and mental effectiveness of AF personnel as well as public health and epidemiological technologies. Clinical Research Program supports the transition of basic research into applied biomedical solutions. The AF conducts Clinical Investigation activities at 9 research sites, 3 with active animal laboratories, which align current research program with HAF Requirements and MAJCOM programmed clinical research requirements.

Defense Health Program
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Date: January 2006
 R-1 Item Nomenclature: 4
 Biomedical Technology - 0602115HP (Continued)

Appropriation/Budget Activity
 Defense Health Program/BA-2

B. Program Change Summary:

COST (\$ in Millions)	FY 2005	FY 2006	FY 2007
FY07 Budget Estimates Submission RDT&E	0.000	3.000	3.000
FY07 President's Budget Submission RDT&E	0.000	2.970	3.000
Total Adjustments	0.000	-0.030	0.000
Congressional Program actions			
Congressional rescissions		-0.030	
Congressional increases			
Reprogrammings			
SBIR/STTR Transfer - year of execution adjustment			
Internal Transfer			

C. Other Program Funding Summary:

	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
	<u>Actual</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>
DHP Operation & Maintenance							
BA-1, PE 0807714	1.000	1.500	2.500	2.500	2.500	2.500	2.500

D. Acquisition Strategy: Not applicable.

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Date: January 2006
R-1 Item Nomenclature: 5
Medical Development - 0603115HP

Appropriation/Budget Activity
Defense Health Program/BA-2

COST (\$ in Millions)	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
	<u>Actual</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>
Total PE 0603115HPCost	403.897	389.614	34.448	34.827	35.258	35.842	36.430
Deployed Warfighter Protection	4.871	4.950	5.000	5.000	5.000	5.100	5.202
Epidemic Outbreak Surveillance		5.940	8.000	6.600	5.000	2.000	2.000
Medical Modernization Programs		1.980	0.000	1.400	3.000	6.000	6.000
Advanced Diagnostic Laboratory (ADL), San Laboratory Support (DHP Navy)		1.980 15.938	2.000 19.448	2.000 19.827	2.000 20.258	2.000 20.742	2.000 21.228
AF Environmental and Occupational Factors in Women's Health Program	1.266						
Aircrew Laser Eye Protection	5.358						
Cancerous Brain Tumor Drug Research	0.974						
Chronic Mylogenous Leukemia Research (CMLF)	4.141	4.257					
Computational Neuroscience Research	4.141						
DNI Anthrax Therapeutic	1.656						
Demonstration Site Projects	0.482						
Genetic Cancer Research in Women	1.462						
Global HIV/AIDS Prevention	7.306						
Gulf War Illness	3.653						
Integration Healing Practices for Veterans	1.364						
Life Sciences Research Initiative	0.488						
Manganese Health research	2.192	1.386					
Medical Error Reduction Initiative	0.974						
Medical Research	48.712	49.500					
Metabolic Defense	2.143	2.178					
Muscle Research Consortium	3.409	2.376					
Muscular Dystrophy Research	2.435						
National Diabetes Model Program (Type 2 Diabetes Research)	15.588						
National Prion Research Program	1.462						
Ophthalmology Training and Education	1.462						
Ovarian Cancer Research	9.742	9.900					
Peer-Review Breast Cancer Research	146.135	126.225					
Peer-Review Prostate Cancer Research	82.810	79.200					
Periscopic Surgery	2.143	1.485					
Portable Remote Medical Collection and Rel	0.974						
Preventing Epilepsy after Traumatic Brain	0.974	0.990					
Preventive Medicine Research for Prostate	1.364	1.683					
Prosthetics and Orthodontics Education Prc	0.561						
Rapid Identification and Treatment by AFSC	3.897						

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Date: January 2006
R-1 Item Nomenclature: 5
Medical Development - 0603115HP (Continued)

Appropriation/Budget Activity
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Real Time Healthcare Management		
Integration Demonstration w/USAF SG	0.974	
Smart Shelf Chain of Custody and Control		
of Medical Records	4.290	
Spinal Cord Injury Research	1.462	
Telerobotic and Minimally Invasive Surgery	3.995	2.178
Tripler Cancer Care	8.287	
Tuberous Sclerosis Complex (TSC) Research	3.118	4.257
U.S. Military Cancer Institute	4.871	
U.S. Military Complementary and Alternativ	2.045	
Virtual Medical Trainer	0.974	
WRAMC Amputee Center and Clinical Applied	9.742	
Amyotrophic Lateral Sclerosis (ALS)		2.574
Armed Forces Medical and Food Research		1.386
Bethesda Hospitals Emergency Preparedness Partnership		4.257
Bio-Molecular Material Composites Research Program		0.990
Blast Injury Prevention, Mitigation and Treatment Initiati		5.544
Computer Assisted Medical Diagnosis		1.485
Copper Antimicrobial Research Program		1.980
Downed Pilot Forward Osmosis Water Filtration System		2.079
Early Diagnosis, Treatment and Care of Cancer Patients		2.475
Global HIV/AIDS Prevention Program		5.247
Hawaii Federal Health Care Network		21.434
Medical Surveillance Technology - Clinical Looking Glass		2.079
Medical Vanguard Diabetes Management Project		0.891
Micro encapsulation and Vaccine Delivery Research		2.574
Noninvasive Hydration and Homodynamic Monitoring		0.990
Noninvasive Nanodiagnosics of Cancer		1.980
Platelet Transfusion Therapy		0.990
Regenerative Medicine Research		0.990
Special Operations Injury Prevention Program		1.089
Stress Disorders Research Initiative at Fort Hood		2.970
Supervision Using Electro-Active Optics		3.465
U.S. Military Cancer Care Institute at WRAMC		2.970
Military Burn Victim Treatment and Care		0.990
Water-Related Viral Disease Countermeasures for the AF		1.782

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**Date: January 2006
R-1 Item Nomenclature: 5
Medical Development - 0603115HP (Continued)**

**Appropriation/Budget Activity
Defense Health Program/BA-2**

A. Mission Description and Budget Item Justification:

The majority of programs are Congressionally mandated requirements for medical research. Congressionally mandated medical requirements were appropriated as part of the Defense Health Program, beginning in Fiscal Year 1999 National Defense Appropriation Act, for specific medical RDT&E projects. The goals of these programs are to stimulate innovative research through a competitive, peer-reviewed research program. For the larger, ongoing programs, such as Breast, Prostate and Ovarian Cancer Research, emphasis has been on (1) building a national research infrastructure by funding large, multidisciplinary program projects focused on detection; (2) encouraging innovative approaches to research by funding new ideas and technology with or without supporting preliminary data; and (3) recruiting a sufficient number of new, independent investigators. Congressionally directed research in FY 06 includes the following topics: Amyotrophic Lateral Sclerosis (ALS); Armed Forces Medical and Food Research; Bethesda Hospitals Emergency Preparedness Partnership; Bio-Molecular Material Composites Research Program; Blast Injury Prevention, Mitigation and Treatment Initiative; Chronic Epilepsy in Severe Head Injuries; Copper Antimicrobial Research Program; Downed Pilot Forward Osmosis Water Filtration System; Early Diagnosis, Treatment and Care of Cancer Patients; Global HIV/AIDS Prevention Program; Chronic Myelogenous Leukemia Research Program (CMLRP); Manganese Health Research Program; Medical Surveillance Technology - Clinical Looking Glass; Medical Vanguard Diabetes Management Project; Metabolic Defense Research Program; Micro encapsulation and Vaccine Delivery Research; Military Burn Victim Treatment and Care; Muscle Research Consortium; Noninvasive Hydration and Homodynamic Monitoring; Noninvasive Nan diagnostics of Cancer; Peer Reviewed Medical Research Program; Peer Reviewed Ovarian Cancer Program; Peer Reviewed Prostate Cancer Program; Peer Reviewed Breast Cancer Research Program; Periscopic Surgery Research; Platelet Transfusion Therapy; Preventive Medicine Research for Prostate Cancer; Regenerative Medicine Research; Special Operations Injury Prevention Program; Stress Disorders Research Initiative at Fort Hood; Supervision Using Electro-Active Optics; Telerobotics and Advanced Minimally Invasive Surgery; Tuberous Sclerosis Complex (TSC); U.S. Military Cancer Care Institute at WRAMC; USAF Environmental and Occupational Factors in Women's Health Program; and Water-Related Viral Disease Countermeasures for the AF.

Deployed Warfighter Protection, managed by the Army Medical Service, is to develop protection for ground forces from disease-carrying insects.

Medical Modernization Program in the Air Force Medical Service was funded by a realignment of DHP Operation and Maintenance to DHP RDT&E appropriation beginning in Fiscal Year 2006 and out. The program supports the RDT&E efforts needed to address ongoing and planned Air Force Medical Service modernization initiatives, which are aimed to meet new or enhanced capabilities to include: Restore Health: Modernization projects aimed to improve recovery of individuals from illness and/or injury. Advanced medical technologies, including clinical and non-clinical applications, developed to meet requirements and provide capabilities to respond/treat/manage/return individuals to duty status. Enhance Human Performance: Enhance human health and performance to maximize effectiveness and ability to operate; develop and demonstrate advanced biometric capabilities; and improve human ability (i.e. visual, auditory, cognitive) to operate under adverse environments to include CBRNE, directed energy, and high operational tempo. Fit and Healthy Force: Develops/assesses technologies and systems designed to maintain healthy force; provide advanced biotechnology platforms and bioinformatics to identify susceptibility to disease and injury; develop/improve the ability to monitor disease, apply preventive, prophylactic and therapeutic measures; and improve healthcare delivery. Prevent Casualties: Demonstrate and assess new efforts to enhance responsiveness to emerging threats under various environmental conditions; provide proven effective capabilities to deploy advanced technologies for environmental surveillance, delivery of patient health care, and hazard assessment and response; and conduct necessary advanced technology demonstration of custom laser refractive surgery as applicable to aerospace operations.

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Date: January 2006
R-1 Item Nomenclature: 5
Medical Development - 0603115HP (Continued)

Appropriation/Budget Activity
Defense Health Program/BA-2

The Air Force Medical Service has transferred funding to DHP RDT&E from DHP Operation and Maintenance appropriation beginning in Fiscal Year 2006 and out to the Epidemic Outbreak Surveillance (EOS) program. The program is an integrated system for informed decision management involving infectious diseases, diagnostics and bioinformatics. EOS provides a "dual use" functionality/capability for the AF and ultimately DoD because the technologies and information that result are seamlessly built into the medical care system. What will be introduced and operationalized with EOS is (1) real-time (2 hour) diagnostic capability for on target diagnosis and treatment; (2) rapid dissemination of decision quality information to all layers of medical care and command. The other value is that EOS brings a prototype biosurveillance (some say biodefense) capability to be looking continually for the zebra (unusual occurrence of disease) in the sea of day to day illness that presents just as most of the usual illnesses present (i.e. hundreds of respiratory illness present like the "flu" and they may in fact be flu or anthrax, etc.). Epidemic Outbreak Surveillance (EOS) is a systems of systems programmed to establish an operational prototype biodefense system and validate the performance of the system within real world outbreaks of infectious respiratory disease. Six technology domains must be integrated to assemble and operate the EOS system. Three of these domains represent deliverable capabilities from the EOS system. Advanced diagnostic platforms detect small numbers of pathogen genomes, simultaneously differentiate among diverse viral and bacterial pathogens, and operate in near real time. Complementary platforms address genetic fingerprints of pathogens and signature immune responses of exposed or infected individuals. Advanced epidemiology leverages gold standard methodologies and technologies (DoD Global Emergent Infections Surveillance (GEIS)). The EOS real world test bed leverages recurrent outbreaks of Acute Respiratory Disease among basic military trainees at Lackland AFB. Integrated diagnostics and informatics capabilities of EOS are validated with respect to providing advanced situational awareness and decision quality information to stakeholders. The other three domains represent enabling capabilities of the EOS system: (1) Network IT provides integration of advanced diagnostics and medical data sets for a coherent interface to the system end users. (2) Bioinformatics is essential for design of advanced pathogen- and host-based diagnostics, and to transform large data sets to decision-quality information. (3) The ethical, legal and social issues (ELSI) component of the EOS system proactively addresses issues that might otherwise compromise the capability to transition EOS product(s) to the warfighter community. The EOS program leverages government and commercial off-the-shelf technologies (GOTS and COTS) at every point of implementation, with R&D applications starting at TRL 4 to 5 (2002). The current level of integration and T&E experience to date raise EOS technologies TRL 5 to 7 (2004). Selection for a three year ACTD and Transition Year should end with all system components at TRL 7 to 9. EOS complements the much larger investments currently made in DoD biological defense systems and capabilities. EOS does *not* duplicate or replace other approaches that emphasize: arrays of biological point detectors and air/water/surface sampling strategies; syndromic surveillance of centralized medical data records; nor unconventional surveillance measures (OTC sales, school absences, video cough counting, etc.). EOS focuses on the local command, leveraging data acquisition and analysis on site, and directing results as immediate advantages to the local Command. At the same time, analytical results (not large data arrays) from the local EOS installation are readily piped up into neighboring regional or national surveillance operations.

The Advanced Diagnostic Laboratory (ADL) funding has been transferred to Defense Health Program (DHP) RDT&E from DHP Operation and Maintenance appropriation beginning in FY 2006 and out. The ADL and test bed/range sustainment, maintenance, and modernization needed to accomplish the various ongoing RDT&E efforts conducted at the San Antonio, Texas location. The ADL supports the Epidemic Outbreak Surveillance program to include cost of operations, maintenance, study and required analysis.

This program element includes RDT&E, Navy funds for operating and miscellaneous support costs at RDT&E, Navy laboratories and other installations, facility and civilian personnel costs not directly chargeable to RDT&E, Navy projects. Also includes RDT&E, Navy funds for RDT&E, Navy laboratories and facilities for research, support, equipment, minor construction and other investment and materiel support costs not directly chargeable to RDT&E, Navy projects. Excludes military manpower and related costs, non-RDT&E, Navy base operating costs, and military construction costs which are included in other appropriate programs.

Program decreases FY05 to FY06 can be predominately attributed to the omission of Congressionally mandated programs.

Program increases between FY06 and FY07 are predominately associated with Epidemic Outbreak Surveillance, Advanced Diagnostic Laboratory programs and Laboratory Support for DHP Navy.

Defense Health Program
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Exhibit R-2, DHP Budget Item Justification

Date: January 2006
R-1 Item Nomenclature: 5
Medical Development - 0603115HP (Continued)

Appropriation/Budget Activity
Defense Health Program/BA-2

In the Navy Medical Department, this program element includes RDT&E, DHP funds for operating and miscellaneous support costs at the RDT&E, DHP laboratories and other installations, facility and civilian personnel costs not directly chargeable to the RDT&E, DHP projects. Also includes RDT&E, DHP funds for research, support, equipment, minor construction and other investment and materiel support costs at these same laboratories that are not directly chargeable to RDT&E, DHP projects. Excludes military manpower and related costs, non-RDT&E, Navy appropriation base operating costs, and military construction costs which are included in other appropriate programs.

B. Program Change Summary:

COST (\$ in Millions)	FY 2005 <u>Actual</u>	FY 2006 <u>Estimate</u>	FY 2007 <u>Estimate</u>
FY07 Budget Estimates Submission RDT&E	438.258	31.099	34.448
FY07 President's Budget Submission RDT&E	403.897	389.614	34.448
Total Adjustments	-34.361	358.515	0.000
Congressional Program actions			
Congressional rescissions	-0.389	-3.935	
Congressional increases		362.450	
Reprogrammings	12.217		
SBIR/STTR Transfer - year of execution at	-10.381		
Internal Transfer	-35.808		

C. Other Program Funding Summary:

	FY 2005 <u>Actual</u>	FY 2006 <u>Estimate</u>	FY 2007 <u>Estimate</u>	FY 2008 <u>Estimate</u>	FY 2009 <u>Estimate</u>	FY 2010 <u>Estimate</u>	FY 2011 <u>Estimate</u>
DHP Operation & Maintenance							
BA-1, PE 0807714 (Air Force)	3.000	3.500	4.500	4.500	4.500	4.500	4.500

D. Acquisition Strategy: Not applicable.

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Date: January 2006
R-1 Item Nomenclature: 6
Small Business Innovative Research - 0605502HP

Appropriation/Budget Activity
Defense Health Program/BA-2

COST (\$ in Millions)	FY 2005 <u>Actual</u>	FY 2006 <u>Estimate</u>	FY 2007 <u>Estimate</u>	FY 2008 <u>Estimate</u>	FY 2009 <u>Estimate</u>	FY 2010 <u>Estimate</u>	FY 2011 <u>Estimate</u>
Total PE Cost	13.123	0.000	0.000	0.000	0.000	0.000	0.000
Small Business Innovative Research	13.123	0.000	0.000	0.000	0.000	0.000	0.000

A. Mission Description and Budget Item Justification:

The DHP Small Business Innovative Research program will be funded in the year of execution. The program funds small business proposals chosen to enhance military medical research and information technology research. Funds have been transferred from all extramural DHP RDT&E programs at the rate of two and one-half percent.

B. Program Change Summary:

COST (\$ in Millions)	FY 2005 <u>Actual</u>	FY 2006 <u>Estimate</u>	FY 2007 <u>Estimate</u>
FY07 Budget Estimates Submission RDT&E	0.000	0.000	0.000
FY07 President's Budget Submission RDT&E	13.123	0.000	0.000
Total Adjustments	13.123	0.000	0.000
Congressional Program actions			
Congressional rescissions			
Congressional increases			
Reprogrammings			
SBIR/STTR Transfer - year of execution at	13.123	0.000	0.000

C. Other Program Funding Summary: N/A

D. Acquisition Strategy: Not applicable.

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Date: January 2006
R-1 Item Nomenclature: 7
Information Technology Development - 0605013HP

Appropriation/Budget Activity
Defense Health Program/BA-2

COST (\$ in Millions)	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
	<u>Actual</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>
Total PE Cost	106.094	136.847	86.696	60.300	87.409	89.765	83.516
Military Computer-Based Patient Record (MCP)	5.689	37.505	20.232	5.461	0.710	1.371	19.241
TRICARE On Line (TOL)	0.452	5.244	2.544	2.590	6.031	5.191	5.544
Defense Blood Standard System (DBSS)	1.260	1.485	1.462	1.462	1.462	1.492	1.522
Executive Information/Decision Support System (EI/DS)	2.085	15.507	10.742	8.114	7.798	11.478	5.709
Defense Medical Logistics Standard System (DMLSS)	2.729	1.029	0.814	1.170	15.019	22.529	1.120
Defense Medical Human Resources System (internet) (DMHRSi)	0.000	4.493	4.905	0.000	16.782	6.147	0.000
Enterprise Wide Scheduling and Registration (EWS-R)	6.394	13.522	6.191	0.000	0.402	0.256	0.000
Patient Accounting System (PAS)	0.948	4.696	1.111	0.304	0.271	0.129	0.000
Expense Assignment System IV (EAS IV)	0.000	0.000	0.000	0.000	0.201	12.554	24.030
Theater Medical Information Program (TMIP)	29.443	13.436	11.204	16.643	14.658	12.330	11.700
TRANSCOM Regulation and Command and Control Evacuation System (TRAC2ES)	4.152	5.226	5.661	4.356	3.169	0.000	0.000
Joint Electronic Health Record Interoperability (JEHRI)	3.433	2.722	5.074	4.875	4.875	0.000	0.000
Patient Safety Reporting (PSR)	1.930	2.518	2.546	3.280	1.345	0.129	0.000
Veterinary Service Information Management System (VSIMS)	0.000	3.003	1.099	0.000	0.000	0.000	0.000
Items less than \$1.0 million	0.440	0.000	0.000	0.000	0.538	1.504	0.430
Other Related Technical Activities	0.000	3.756	2.258	1.946	4.153	4.580	4.064
MHS CIO Management Operations	2.996	3.613	0.992	0.171	0.000	0.000	0.000
MHS CIO Management Operations (Navy)	3.615	3.747	3.861	3.928	3.995	4.075	4.156
Integrated Clinical Database/Test Bed		2.376	2.400	2.400	2.400	2.400	2.400
AF Family of Medical Web Applications		3.564	3.600	3.600	3.600	3.600	3.600
AF Integrated Medical Information Technology System (IMITS) Initiative	3.703						
Assessment & Demo Center for USAF Surgeon General	3.313						
Automated Clinical Practice Guidelines	3.096						
Clinical Coupler Integration	2.728						
Computer Assisted Medical Diagnostics	1.462						
Computer-Aided Detection & Diagnostics of Breast Cancer	1.078						

Defense Health Program
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Date: January 2006
 R-1 Item Nomenclature: 7
 Information Technology Development - 0605013HP
 (Continued)

Appropriation/Budget Activity
 Defense Health Program/BA-2

Direct Real-Time Secure Collaborative Application/Analysis Sharing Environment for the USAF	0.974	
DoD/Veterans Administration Demonstration Site Projects	0.787	
Hawaii Federal Healthcare Network	20.907	
Healthcare Informatics Testbed	1.656	1.485
Protected Health Informatics	0.824	
AFSG Server Consolidation Initiative		2.475
Directed Mission Upgrades of the Defense Medical Logistics Standard Support System (DMLSS)		4.257
USAF Environmental & Occupational Factors in Women's Health Program		1.188

The Military Health System (MHS) centrally-managed Information Management/Information Technology (IM/IT) Program is linked to the overall MHS Strategic Plan and supports military medical readiness and MHS transformation. The MHS IM/IT Program ensures compliance with the Federal Enterprise Architecture, Federal Health Architecture, and the DoD Business Enterprise Architecture through the MHS Enterprise Architecture which is a mapping of all system requirements to one of the four MHS core business processes (Manage the Business, Access to Care, Population Health Management, and Provision of Health Services). The enterprise strategy, which creates a prioritized Portfolio of requirements, incorporates reengineering and business process improvements, use of innovative acquisition techniques, integration of commercial off-the-shelf products as well as modular development, where necessary; and integration and/or elimination of legacy systems.

The MHS centrally-managed, IM/IT program includes the following major (Acquisition Category (ACAT) I) initiatives: 1) AHLTA (included in the Military Computer-Based Patient Record (CPR) initiative) integrates patient data from difference times, providers and sites of care and will contain a Service member's life-long medical record of all illnesses and injuries, care and inoculations received and exposure to different hazards; 2) Theater Medical Information Program (TMIP), a seamless, interoperable medical system, designed to support theater health services across all echelons of care; and 3) Defense Medical Logistics Standard System (DMLSS), designed to support cataloging, customer logistics, hospital facility operations, property accounting, maintenance of biomedical devices, purchasing and contracting, and inventory management. DMLSS is in sustainment with pre-planned product improvements; and 4) Executive Information/Decision Support (EI/DS), which provides support information used by managers, clinicians, and analysts to manage the business of health care within the MHS, is in sustainment with pre-planned product improvement. The Central IM/IT Program also contains funding for ACAT III initiatives such as the following: the Defense Medical Human Resources System (internet), the Patient Accounting System (PAS), Defense Blood Standard System (DBSS), TRICARE On Line (TOL), Enterprise Wide Scheduling and Registration (EWS-R), the Defense Occupational and Environmental Health Readiness System - Industrial Hygiene (DOEHRS-IH), and Patient Safety Reporting (PSR). A joint DoD/Veterans Affairs (VA) sharing initiative, the Joint Electronic Health Record Interoperability (JEHRI), is also included in the Central IM/IT Program for the DoD portion of this effort.

Program increases are mainly associated with the development of the Clinical Data Repository (CRD/HDR) module within JEHRI. Decreases between FY06 and FY07 reflector adjusted development requirements for Prospective Payment Support and Medical Surveillance modules within EI/DS, continued CHCS II development requirements, Patient Accounting System (PAS) development associated with the Chargemaster billing module, TRICARE On Line (TOL), and Health Insurance Portability & Accountability Act (HIPAA) National Provider Identifier requirement.

The Navy Medical Service is responsible for funding the development required for systems such as Shipboard Medical Immunization Tracking, SNAP Automated Medical System (SAMS) and Ophthalmic Production systems at NOSTRA, OPAS. Integration between DHP components ensure there is no developmental overlap within the DHP.

**Defense Health Program
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**Date: January 2006
R-1 Item Nomenclature: 7
Information Technology Development - 0605013HP
(Continued)**

**Appropriation/Budget Activity
Defense Health Program/BA-2**

The Air Force Medical Service (AFMS) programs resulted from a funding realignment to Defense Health Program (DHP) RDT&E from the DHP Operation and Maintenance appropriations beginning in Fiscal Year 2006 and out. The Information Management/Information Technology (IM/IT) Program incorporates the Air Force Transformation Flight Plan, Air Force CONOPS, and Air Force Medical Service Concept Document, which aligns to DoD Medical Program Guidance. The AFMS core capabilities: 1) Ensure a Fit and Healthy Force; 2) Prevent Casualties; 3) Restore Health; 4) Enhance Human Performance; and to provide for enabling services supporting and connecting these capabilities in the arena of software integration in accordance with the Air Force Enterprise Architecture end-state as defined by the Air Force Integrated Framework within the Global Combat Support Services (GCSS) data services construct.

The Air Force Medical Service IM/IT modernization program includes the following initiatives: creation of the Environmental, Safety and Occupational Health management information system, and continued major development efforts to construct the Integrated Clinical Database - Air Force, in addition to building and transitioning web applications to the Air Force Portal as solutions to the existing validated requirements generating more than \$30M in other software development funding requirements over the program 06-11 life-cycle. The Integrated Clinical Database offers the following capabilities: Enterprise Application Integration (EAI) lays the foundation to get various "stovepipe" systems to share information and processing power. It does so by providing the ability to integrate not only data but also methods and objects. This adds "intelligence" to the ICDB translating to agile functionality and rapid deployment that benefits the enterprise as a whole while leveraging low cost grass root capabilities designed and developed by the users. EAI for the ICDB translates to more robust capabilities, more data where it is needed and decision support in a timely manner allowing the ICDB to provide solutions to validated Air Force Medical requirements such as a more robust immunization and personnel readiness tracking application. Data Analysis Capability: The ICDB provides an operational data store that allows for automated capabilities not found in existing source databases. This is achieved through ease of integration allowing development efforts to focus on the user's needs vs. the technical requirements to extract the data. The capabilities are largely clinical and operational in nature but open the door to population and business management. Through the use of data analysis, the ICDB as a clinical technology development platform and test bed can provide the basis for additional capabilities that will give tools to non-clinicians to enhance their abilities to increase the health of patient populations and business operations. The adoption of several key technologies expands the infrastructure to support development of clinical and business tools for all types of healthcare workers. Microsoft's .Net framework incorporated in architecture specifically designed by the ICDB PO eases the integration of functionality onto one platform. This equates to substantially lower costs and much more rapid deployment of capabilities. Implementation of a common data standard XML provides secure and simple access to data from existing and future automated systems for requirements not yet known. Enhanced Hardware Capacity: With the ever growing demand for new capabilities in the ICDB, enhancing the current configuration provides long term capacity to meet these needs. As the ICDB becomes the standard platform of choice for systems development, providing the necessary hardware infrastructure is crucial to keeping the platform available for efforts as they are completed. Future applications are expected to make novel use of data elements currently not in production like images and video to support validated Air Force telehealth and telemedicine requirements. Air Force Medical Omnibus Web Applications Pool (AFMOWAP) supports the research, development, test and evaluation of AF Medical Service web-based software requirements. Efforts include conversion of existing client-server based applications to cost-effective web-based solutions as well as new software development from approved requirements. Conversion of existing applications consolidates disparate systems into enterprise-wide applications. Benefits include significant savings over client-server systems, improved access to information by all levels of leadership, and vastly improved security. In addition AFMOWAP directly supports DoD and AF guidance and policy for IT Services Consolidation.

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Date: January 2006
R-1 Item Nomenclature: 7
Information Technology Development - 0605013HP
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Appropriation/Budget Activity
Defense Health Program/BA-2

B. Program Change Summary:

COST (\$ in Millions)	FY 2005	FY 2006	FY 2007
	<u>Actual</u>	<u>Estimate</u>	<u>Estimate</u>
FY07 Budget Estimates Submission RDT&E	77.036	128.729	86.696
FY07 President's Budget Submission RDT&E	106.094	136.847	86.696
Total Adjustments	29.058	8.118	0.000
Congressional Program actions			
Congressional rescissions		-1.382	
Congressional increases		9.500	
Reprogrammings	4.304		
Fact-of-Life Adjustments			
SBIR/STTR Transfer - year of execution ac	-2.742		
Internal Adjustment	27.496		

C. Other Program Funding Summary:

	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
	<u>Actual</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>
DHP Operation & Maintenance	680.877	617.435	668.783	659.151	711.847	715.979	739.314
BA-1, PE 0807714	2.900	2.900	2.900	2.900	2.900	2.900	2.900
BA-1, PE 0807724	1.700	1.700	1.700	1.700	1.700	1.700	1.700
BA-1, PE 0807781	97.157	101.996	111.098	110.256	112.131	113.681	115.243
BA-1, PE 0807793	560.531	485.756	527.235	517.934	568.250	570.529	591.998
BA-1, PE 0807795	15.938	20.408	21.033	21.450	21.860	22.107	22.355
BA-1, PE 0807995	2.651	4.675	4.817	4.911	5.006	5.062	5.118
DHP Procurement	216.098	175.139	207.048	209.097	181.711	189.912	187.739
BA-3, PE 0807720	0.000	0.000	2.000	0.500	0.500	0.510	0.520
BA-3, PE 0807721	216.098	175.139	205.048	208.597	181.211	189.402	187.219

**Defense Health Program
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**Date: January 2006
R-1 Item Nomenclature: 7
Information Technology Development - 0605013HP
(Continued)**

**Appropriation/Budget Activity
Defense Health Program/BA-2**

D. Acquisition Strategy: Not applicable.

E. Program Accomplishments and Plan:

FY 2005 Accomplishments

- Completed developmental testing of TMIP Block 2 Release 1.
- Purchased Pharmacy and Laboratory Commercial Off-the-Shelf (COTS) products for the Composite Health Care System II (CHCS II) associated with the development of Block 3.
- Completed formal design and development of the Medical Surveillance data mart and Clinical Data Mart (CDM) Initial Operating Capability (IOC) within EI/DS.
- Completed preparations and selected appropriate demonstration sites for EWS-R. Completed interface and data management design.
- Began development of TRAC2ES Full Operating Capability (FOC) increment one, which includes intra-theater regulating at military treatment facilities (MTFs) and expanding reporting/interfacing capabilities.
- Conducted project planning and design of TOL enhancements. Designed plan to provide TOL server failover capability.
- Completed testing at limited rate deployment sites for Patient Accounting System (PAS) Coding and Compliance Editor.
- Completed documentation and certification, including modification of software code, to meet DoD information assurance and security standardization for DMLSS Air Evacuation Equipment Management module. Additionally, redesigned the DMLSS Joint Medical Asset Repository (JMAR) web-user interface to meet security, functionality, and navigation requirements.
- Began reengineering of DBSS version 6.00 (web-based global database).

FY 2006 Plans

- Receive Milestone C approval for TMIP Block 2 Release 1. Complete developmental testing of TMIP Block 2 Release 2 and receive fielding decision.
- Purchase Radiology and Inpatient Commercial Off-the-Shelf (COTS) products for the Composite Health Care System II (CHCS II). Receive Milestone B approval for CHCS II Block 3.
- Complete developmental test and evaluation (DT&E) for Medical Surveillance and CDM IOC within EI/DS. Commence formal design and development of the Clinical Data Warehouse (CDW), Prospective Payment capability, Performance Management Display Tool and additional clinical and business reporting tools within EI/DS.
- Initiate legacy system conversion to object-based relational database solution, develop web interfaces & initiate System Integration & Testing (SIT) and Design Integration Testing (DIT) testing of EWS-R.
- Continue TRAC2ES FOC increment one development efforts. Deliver first reporting/interfacing improvements in 3rd Qtr FY 2006. Begin preparation for TRAC2ES FOC increment two implementation planning.
- TOL pre-planned product improvements acquisition.
- Acquire and configure the PAS Charge Master Based billing module and prepare Milestone C documentation.
- Begin configuration of DMHRSi Block 2.0 (Enterprise Wide Provider Database Capability, National Provider Identifier (NPI), Center for Medicaid and Medicare Services (CMS) message interface, development of new Interface Control Documents (ICDs) etc.)
- Begin development of a medical logistics data warehouse for the JMAR module within DMLSS.
- Conduct testing of DBSS version 6.00 and obtain clearance from the Food and Drug Administration (FDA).

FY 2007 Plans

- Complete developmental testing of TMIP Block 2 Release 3 and begin development of Block 2 Release 4.
- Conduct testing on CHCS II Block 3.
- Complete formal design, development, and DT&E of the Clinical Data Warehouse (CDW), Prospective Payment capability, Performance Management Display Tool and additional clinical and business reporting tools within EI/DS.
- Deliver first phase of TRAC2ES intra-theater regulating and final reporting/interfacing capabilities in 1st Qtr FY 2007. Begin development of remaining interfaces with the Department of Veteran's Affairs (VA) National Disaster Medical System as well as CHCS II. Develop auto notification of patient movement.
- Continue TOL pre-planned product improvements acquisition.
- Begin configuration of DMHRSi Block 3.0 (Reserve Personnel Management, Special Pay, etc.)
- Continued development of a medical logistics data warehouse for the JMAR module within DMLSS.
- Add Products Components Processing Functions to DBSS (track time to freezer, time thawed, spun and frozen).