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Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Defense Health Program **Date:** March 2014

Appropriation/Budget Activity 0130: Defense Health Program I BA 2: RDT&E	R-1 Program Element (Number/Name) PE 0605023HP I Integrated Electronic Health Record (iEHR)
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COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
Total Program Element	0.000	-	19.912	68.267	-	68.267	34.560	8.125	-	-	Continuing	Continuing
444A: Integrated Electronic Health Record Inc 1/ Defense Medical Information Exchange (DMIX)	0.000	-	12.634	45.915	-	45.915	26.864	0.433	-	-	Continuing	Continuing
449A: Virtual Lifetime Electronic Record (VLER) HEALTH	0.000	-	2.558	22.352	-	22.352	7.696	7.692	-	-	Continuing	Continuing
483A: Information Technology Development - DoD Healthcare Management System Modernization (DHMSM)	-	-	4.720	-	-	-	-	-	-	-	Continuing	Continuing

MDAP/MAIS Code:
Other MDAP/MAIS Code(s): 465

The FY 2015 OCO Request will be submitted at a later date.

A. Mission Description and Budget Item Justification

In March 2008, the MHS embarked upon Electronic Health Record (EHR) modernization planning, establishing the initial Electronic Health Records Way Ahead (EHRWA).

In March 2011, the Program was expanded to include the Department of Veterans Affairs (VA) in a joint initiative to implement a new, integrated electronic health record for both Departments, called the Integrated Electronic Health Record (iEHR) program.

Secretary Hagel's Memorandum titled "Integrated Electronic Health Records," dated May 2013, provided additional direction to the program:

- DoD shall continue near-term coordinated efforts with VA to develop data federation, presentation, and interoperability. This near-term goal shall be pursued as a first priority separately from the longer-term goal of health record information technology (IT) modernization.
- DoD shall pursue a full and open competition for a core set of capabilities for EHR modernization.

To fulfill Secretary Hagel's directive, parallel programs have been defined, splitting the original iEHR program into two distinct areas. In the Under Secretary of Defense for Acquisition, Technology and Logistics (USD (AT&L)) Acquisition Decision Memorandum (ADM), dated June 21, 2013 and an ADM providing direction and guidance for PEO DHMS issued on January 2, 2014, the former joint DoD and Department of Veterans Affairs (VA) Integrated Electronic Health Record (iEHR) program has been restructured to pursue two separate but related healthcare information technology efforts, the DoD Healthcare Management System Modernization (DHMSM) program

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and a newly defined iEHR program focused on providing seamless integrated sharing of electronic health data between the DoD and VA (renamed Defense Medical Information Exchange (DMIX)).

iEHR RDT&E is reported under the program element (PE) 0605013 through FY 2013 inclusive, but iEHR, VLER Health and DHMSM will be reported under new program element 0605023 for FY 2014. In FY 2015 and out, PE 0605023 will report only iEHR and VLER Health since DHMSM will have its own PE starting in FY 2015.

B. Program Change Summary (\$ in Millions)	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total
Previous President's Budget	-	64.100	24.566	-	24.566
Current President's Budget	-	19.912	68.267	-	68.267
Total Adjustments	-	-44.188	43.701	-	43.701
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-43.614			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-0.574			
• Departmental Fiscal Guidance - Total	-	-	43.701	-	43.701
Projects 444A and 449A					

Change Summary Explanation

FY 2013: No Change.

FY 2014: Realignment from DHP RDT&E, PE 0605013-Information Technology Development (-\$64.100 million) to DHP RDT&E, PE 0605023-Integrated Electronic Health Record (iEHR) (+\$64.100 million) for Integrated Electronic Health Record (iEHR).

FY 2014: Departmental Fiscal Guidance adjustment (-\$43.614 million).

FY 2014: Realignment from Defense Health Program, Research, Development, Test and Evaluation (DHP RDT&E), PE 0605023-Integrated Electronic Health Record (iEHR) (-\$0.574 million) to DHP RDT&E PE 0605502-Small Business Innovation Research (SBIR) Program (+\$0.574 million).

FY 2015: Departmental Fiscal Guidance Additions to DHP RDT&E, PE 0605023-Integrated Electronic Health Record (iEHR) (+\$43.701 million).

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Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0605023HP / Integrated Electronic Health Record (iEHR)				Project (Number/Name) 444A / Integrated Electronic Health Record Inc 1/ Defense Medical Information Exchange (DMIX)			
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
444A: Integrated Electronic Health Record Inc 1/ Defense Medical Information Exchange (DMIX)	-	-	12.634	45.915	-	45.915	26.864	0.433	-	-	Continuing	Continuing
MDAP/MAIS Code: 465												
# The FY 2015 OCO Request will be submitted at a later date.												
A. Mission Description and Budget Item Justification												
Commensurate with the OSD AT&L Acquisition Decision Memoranda (ADM), dated July 21, 2013 and January 2, 2014, the former joint DoD and VA iEHR program has been restructured within the DoD to pursue two separate but related healthcare information technology efforts, the DoD Healthcare Management System Modernization (DHMSM) program and a redefined iEHR program. These programs report through the PEO DoD Healthcare Management Systems (DHMS) to the USD (AT&L). The redefined iEHR program will be called the Defense Medical Information Exchange (DMIX) and will encompass health data sharing and interoperability across the lifecycle to include data sharing/interoperability with the VA, private healthcare providers and patients. The iEHR Increment 1 initiative will complete delivery of its defined requirements in FY2014 and transition into sustainment beginning in FY2015 under the Defense Health Agency Health Information Technology organization. Due to timelines for budget preparation and submission, a separate initiative could not be generated the funding needed for DMIX in FY2015 is reflected this initiative. A new initiative for the DMIX initiative will be formally established with the FY2016 budget. The DMIX program will acquire the capabilities necessary to securely and reliably exchange standardized, normalized, and correlated health data with all partners through standard data / information exchange mechanisms. This will allow users in different places and different organizations to access, use, and supplement health data (technical interoperability) that has a shared meaning so users (assisted by computers) are able to make care decisions (Semantic Interoperability – Level 4). DMIX will consist of Data Federation (DF), Access Management, Service Oriented Architecture / Enterprise Service Bus (SOA/ESB) capabilities, and leverage Identity Management capabilities provided by DMDC. In addition, VLER Health, to include Exchange and Direct, will continue to be part of the DMIX program. Use of the health data may be done via legacy systems, clinical mobile applications and system agnostic viewers such as the Joint Legacy Viewer (JLV).												
iEHR RDT&E is reported under the program element 0605013 through FY 2013 inclusive, but will be reported under new program element 0605023 for FY 2014 and out. Plans for out year RDT&E are not finalized at this time.												
B. Accomplishments/Planned Programs (\$ in Millions)									FY 2013	FY 2014	FY 2015	
Title: Integrated Electronic Health Record (iEHR) (Tri-Service)									-	12.634	45.915	

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Appropriation/Budget Activity 0130 / 2		R-1 Program Element (Number/Name) PE 0605023HP / <i>Integrated Electronic Health Record (iEHR)</i>		Project (Number/Name) 444A / <i>Integrated Electronic Health Record Inc 1/ Defense Medical Information Exchange (DMIX)</i>	
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2013	FY 2014	FY 2015
Description: The Department will benefit from the iEHR Increment 1 user-facing capabilities. Single Sign-On will streamline the login process allowing the user to sign in once and leverage securely stored credentials to automatically access the other available applications. Context Management will automatically present the same patient's data within all applications in use by the practitioner. iEHR Increment 1 will also enhance infrastructure services such as virtualization; establish a Development Test Center/Environment configuration; and provides critical upgrades to the Clinical Data Repository. The Department will benefit from the work of the newly defined DMIX Program, which will enable interoperability between legacy and new health IT systems, information and people from all critical Defense Health Association (DHA) and VA health data domains. Building from the Data Federation Accelerators, the DMIX will provide secure and reliable exchange of standardized and computable health data with all partners, including other Departments, private sector health care providers, and health information exchange organizations. DMIX will enable the decommissioning of legacy VA-DoD FY 2013 Accomplishments: No funding programmed in this program element. FY 2014 Plans: iEHR Increment 1 Milestone B baseline requirements to include the Essential Business Functions (EBF) of Context Management, a Single Sign-On capability, and Application Virtualization Hosting Environment (AVHE) to support roaming capability in one location will be completed by May 2014. A limited fielding decision will be conducted by May 2014 based on the completion of the Increment 1 Milestone B EBFs. An operational assessment, under the cognizance of DOT&E, will be conducted in support of a planned Full Deployment Decision prior to end of the Fiscal Year. Following successful operational assessment, iEHR Increment 1 will transition to DHA for operations and sustainment. DMIX will complete the 2014 NDAA requirements for health care data to be computable in real time and comply with existing national data standards. In addition, we will provide infrastructure improvements to enhance reliability, scalability, and efficiency of the capability that leverages the MED-COI, which segregates the capability off of the NIPRNet and leverages enterprise patient identity management service. Deliver DMIX Health Data Interoperability and Exchange Roadmap and acquisition strategy. FY 2015 Plans:					

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

	FY 2013	FY 2014	FY 2015
DMIX will sustain existing health data domains, and continue to monitor updated data standards for implementation. Also as national standards evolve for additional data domains, update health data domains to ensure data exchange is standards based.			
• Meet additional requirements as described in 2014 NDAA to provide, where practical, a modern, open-architecture framework that uses computable data mapped to national standards.			
• Initiate decommissioning of legacy health data sharing mechanisms in FY2015 by ensuring Health Data Interoperability and exchange capability will support the identified requirements. Start to enhance the Health Data Interoperability and Exchange capability with additional requirements to support the identified decommissioned legacy health data sharing mechanisms.			
Accomplishments/Planned Programs Subtotals	-	12.634	45.915

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

Line Item	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
• BA-1, PE 0807784HP: <i>Information Technology Development -</i>	-	60.395	30.366	-	30.366	-	-	-	-	Continuing	Continuing
• BA-3, 0807784HP: <i>Replacement/Modernization</i>	-	-	8.243	-	8.243	6.860	-	-	-	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.

iEHR/DMIX is a collaborative effort between the DoD and VA to share Health Care Resources to improve access to, and quality and cost effectiveness of, health care as mandated by law. This investment is deeply embedded in the MHS Enterprise Roadmap as both Departments have need for modernization/ replacement of existing legacy systems. This investment will use a combination of an open architecture approach, and the purchase (in some instances) of GOTS and COTS products.

E. Performance Metrics

Program cost, schedule and performance are measured periodically using a systematic approach as required for Major Automated Information Systems (MAIS) per DoD Directives and Instructions.

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Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0605023HP / Integrated Electronic Health Record (iEHR)				Project (Number/Name) 449A / Virtual Lifetime Electronic Record (VLER) HEALTH			
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
449A: Virtual Lifetime Electronic Record (VLER) HEALTH	-	-	2.558	22.352	-	22.352	7.696	7.692	-	-	Continuing	Continuing

The FY 2015 OCO Request will be submitted at a later date.

A. Mission Description and Budget Item Justification

The primary goal of the VLER Health initiative is to enable the secure sharing of health information (i.e., demographic and clinical data) between DoD and external Federal and private sector partners which meets Meaningful Use (MU) requirements to improve healthcare quality, safety, and efficiency. By electronically sharing health information using national standards, that information can support tracking key clinical conditions, communicating that information to better coordinate care, and engaging patients in their own care. The VLER Health initiative provides clinicians with the most up-to-date information, potentially reducing redundant diagnostic tests, medical errors, paperwork and handling, and overall healthcare costs. These benefits, in turn, align with the MHS quadruple aim by ensuring that the military force is medically ready to deploy; the military beneficiary population remains healthy through focused prevention; patient care is convenient, equitable, safe, and of the highest quality; and the total cost of healthcare is reduced through the reduction of waste and focus on quality

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2013	FY 2014	FY 2015
Title: Virtual Lifetime Electronic Record (VLER) HEALTH	-	2.558	22.352
Description: Pursue the primary goal of the VLER Health initiative is to enable the secure sharing of health information (i.e., demographic and clinical data) between DoD and external Federal and private sector partners which meets Meaningful Use (MU) requirements to improve healthcare quality, safety, and efficiency.			
FY 2013 Accomplishments: No funding programmed in this program element.			
FY 2014 Plans: • Re-validate current functional requirements baseline including the capabilities that support VLER Exchange and VLER Direct. • Implement new functionality that fulfills MU Stage 2 requirements and is approved by appropriate DoD governance boards. • Start to roll out the next release of VLER Exchange functionality across enhanced Multi-Service Markets (eMSMs). • Finalize and obtain approval of the Opt-in/Opt-out policy for non-active duty medical beneficiaries. • Improve identity management (i.e., match rates) through collaborative efforts with HealtheWay and Defense Manpower Data System (DMDC) and by integrating with DMDC's Patient Discovery Web Service (PDWS), a technical solution that offers new matching criteria and additional methods for identifying and matching patients. • Modify the VLER 2.1.0.0 solution to render a Consolidated Clinical Document Architecture (C-CDA) that will enable MHS health care providers to receive the C-CDA data set from private sector providers.			

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B. Accomplishments/Planned Programs (\$ in Millions)							FY 2013	FY 2014	FY 2015		
• Modify the VLER 2.1.0.0.solution to comply with Health Insurance Portability and Accountability Act regulations and provide the ability for MHS providers to view health data coded with ICD-10 codes. Encourage vendor and external partner adoption of one common structured data standard as well as standardized style sheets and specifications through participation on HealtheWay’s standards workgroups. • Implement technical enhancements that improve the system performance, meet eHealth Exchange’s technical specifications, and adhere to DoD security and privacy requirements. • Exchange information with additional external partners who become a part of the eHealth Exchange. FY 2015 Plans: • Implement a solution, including development of a full operating capability data set, to transfer data using the eHealth Exchange to the Social Security Administration for the purpose of disability claim adjudication for Wounded Warriors, other Service members and other beneficiaries. • Continue to roll out the VLER Exchange functionality to implement the second phase of the enhanced Multi-Service Markets (eMSMs) and to other markets as eHealth Exchange partners servicing MHS market areas are on-boarded to the eHealth Exchange. • Continue efforts to improve identity management (i.e., match rates) through collaborative efforts with HealtheWay and Defense Manpower Data • Evaluate new standards for implementation, such as Meaningful Use Stage 3, to remain compliant with standards promulgated by the Department of Health and Human Services Office of the National Coordinator for Health Information Technology. • Evaluate and implement the MHS Functional Advisory Committee (FAC)-approved functional requirements delivered in the spring of 2014.											
Accomplishments/Planned Programs Subtotals							-	2.558	22.352		
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
• BA-1, PE 0807784: Integrated Electronic Health Record (iEHR)	-	3.900	6.299	-	6.299	9.112	9.950	-	-	Continuing	Continuing
• BA-3, PE 0807784: Replacement/ Modernization, Integrated Electronic Health Record	-	-	0.938	-	0.938	0.996	0.980	-	-	Continuing	Continuing
Remarks											

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Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0605023HP / <i>Integrated Electronic Health Record (iEHR)</i>	Project (Number/Name) 449A / <i>Virtual Lifetime Electronic Record (VLER) HEALTH</i>
<u>D. Acquisition Strategy</u> 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. <u>E. Performance Metrics</u> Each program establishes performance measurements which are usually included in the MHS IT Annual Performance Plan. Program cost, schedule and performance are measured periodically using a systematic approach.		

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Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0605023HP / Integrated Electronic Health Record (iEHR)				Project (Number/Name) 483A / Information Technology Development - DoD Healthcare Management System Modernization (DHMSM)			
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
483A: Information Technology Development - DoD Healthcare Management System Modernization (DHMSM)	-	-	4.720	-	-	-	-	-	-	-	Continuing	Continuing
# The FY 2015 OCO Request will be submitted at a later date.												
A. Mission Description and Budget Item Justification												
DHMSM will acquire and support deployment, implementation, and sustainment of an electronic health record (EHR) system that replaces the DoD legacy Military Health System (MHS) inpatient and outpatient EHR systems. 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 resulting in: improved accuracy of diagnoses and impact on health outcomes; increased patient participation in the healthcare process; improved patient-centered care coordination; and increased practice efficiencies in all settings, including operational environments.												
B. Accomplishments/Planned Programs (\$ in Millions)									FY 2013	FY 2014	FY 2015	
Title: DoD Healthcare Management System Modernization (DHMSM)									-	4.720	-	
Description: DHMSM will be executed in two planning Segments. DHMSM Segment 1 will focus on replacement of inpatient and outpatient systems, and will encompass deployment of the enterprise EHR to fixed facilities (garrison and non-garrison), as well as Military Treatment Facilities (MTFs) and clinics. DHMSM Segment 2 will focus on replacement of the in-theater EHR, and will encompass deployment of the enterprise EHR to en route, ship-board, and expeditionary components.												
FY 2013 Accomplishments: Funding not programmed.												
FY 2014 Plans: - Program Planning Activities including - Finalize requirements - Develop Request for Proposal (RFP) Package - Prepare supporting Acquisition Documentation to include Acquisition Strategy, Business Case, Engineering Master Plan, Cost Benefit Analysis, Test Strategy, and Deployment and Supportability Plan. - Release Draft RFP. Obtain Authority to Proceed (RFP Release). Release Final RFP. Conduct Source Selection Process												
FY 2015 Plans:												

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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2013	FY 2014	FY 2015
Funding not programmed in this program element.			
Accomplishments/Planned Programs Subtotals	-	4.720	-

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

Line Item	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
• BA-1, PE 0807784HP: <i>Information Technology Development - Integrated Electronic Health Record</i>	-	24.883	-	-	-	-	-	-	-	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.

E. Performance Metrics

Program cost, schedule and performance are measured periodically using a systematic approach per DoD directives and instructions.