Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Defense Health Agency

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

0130: Defense Health Program I BA 2: RDT&E

PE 0605039DHA I PE 0605039HP / DoD Medical Information Exchange and Interoperability

**Date:** May 2017

Interoperating.												
COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
Total Program Element	0.000	10.157	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
458A: DoD Medical Information Exchange and Interoperability / Defense Medical Information Exchange (DMIX)	0.000	10.157	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

### 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 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 Memoranda (ADM), dated June 21, 2013 and January 2, 2014, the former joint DoD and VA Integrated Electronic Health Record (iEHR) program was restructured to pursue two separate but related healthcare information technology efforts, the DoD Healthcare Management System Modernization (DHMSM) program and a newly defined iEHR focused on providing seamless integrated sharing of electronic health data between the DoD and VA to be called Defense Medical Information Exchange (DMIX). The remaining iEHR Increment 1 (iEHR Inc 1) was significantly de-scoped to only the Medical Single Sign-on/Context management (MSSO/CM) implemented at James A. Lovell Federal Health Care Center (JAL FHCC).

• DMIX established a roadmap outlining the future of health data sharing and viewer capabilities for DoD in support of the guidance provided by the President, Congress, and the Secretary of Defense. The roadmap defined a plan to provide a single viewer to be used by DoD and VA that displays an integrated view of a patient's medical history. The viewer leverages existing inherited DoD data-sharing capabilities, and a VA-provided data service in order to collect the patient's health data from the respective, authoritative data stores. Of the various existing viewers, VA and DoD decided to evolve Joint Legacy Viewer (JLV) as the single viewer for use by both Departments. By adopting JLV as a common viewer between DoD and VA, DMIX met the National Defense Authorization Act FY 2014 (NDAA 2014) requirement for "an integrated display of data" which allows DoD to sunset inherited legacy viewers.

<b>Exhibit R-2</b> , <b>RDT&amp;E Budget Item Justification</b> : FY 2018 Defense Health A	gency	<b>Date:</b> May 2017
Appropriation/Budget Activity	D. 1 Dragram Flament (Number/Name)	

#### Appropriation/Budget Activity

R-1 Program Element (Number/Name)

0130: Defense Health Program I BA 2: RDT&E

PE 0605039DHA I PE 0605039HP / DoD Medical Information Exchange and Interoperability

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, PE 0605023 will report only iEHR and VLER Health since DHMSM will have its own PE starting in FY 2015.

In FY 2016 and out, only iEHR Increment 1 will be reported in PE 0605023. DHMSM will continue to be only initiative reported in PE 0605026. However, new PE 06050039 is established for DMIX for FY 2016 and out. DMIX will incorporate the previous VLER Health and JEHRI initiatives.

B. Program Change Summary (\$ in Millions)	FY 2016	FY 2017	<b>FY 2018 Base</b>	FY 2018 OCO	FY 2018 Total
Previous President's Budget	11.000	0.000	0.000	-	0.000
Current President's Budget	10.157	0.000	0.000	-	0.000
Total Adjustments	-0.843	0.000	0.000	-	0.000
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
Reprogrammings	-	-			
SBIR/STTR Transfer	-0.843	-			

# **Change Summary Explanation**

FY 2016: Realignment from Defense Health Program, Research, Development, Test and Evaluation (DHP RDT&E), Program Element (PE) 0605039-DoD Medical Information Exchange and Interoperability (-\$0.843 million) to DHP RDT&E, PE 0605502-Small Business Innovation Research (SBIR) / Small Business Technology Transfer (STTR) Program (+\$0.843 million).

FY 2017: No change.

FY 2018: No change.

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Health Agency										Date: May	May 2017	
Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0605039DHA I PE 0605039HP / 458A DoD Medical Information Exchange and Information				458A I Dolland Interop	roject (Number/Name) 58A I DoD Medical Information Exchange and Interoperability / Defense Medical aformation Exchange (DMIX)		
COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
458A: DoD Medical Information Exchange and Interoperability / Defense Medical Information Exchange (DMIX)	0.000	10.157	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

## A. Mission Description and Budget Item Justification

DMIX program will acquire the capabilities necessary to securely and reliably exchange standardized, normalized, and correlated health data with all partners through standard data/information exchange mechanisms. This allows users in different places and different organizations to access, use, and supplement health data (technical interoperability) that has a shared meaning so users (assisted by computers) are able to make care decisions (Semantic Interoperability – Level 4). DMIX manages the data exchange capability from legacy data stores in order to prepare for the transition to the modernized Electronic Health Record platform being acquired by DoD Healthcare Management System Modernization (DHMSM). DMIX consists of a family of capability initiatives supporting the seamless exchange of standardized health data among DoD, VA, other Federal agencies, and private providers as well as benefits administrators. The DMIX program provides the capability for health care providers to access and view complete and accurate patient health records from a variety of data sources thereby allowing healthcare providers to make faster and higher quality care decisions. DMIX was established in accordance with the joint memo from USD(C) and USD(AT&L) titled "Joint Memorandum on Major Defense Acquisition Program and Major Automated Information System Program Resource Transparency in Department of Defense Budget Systems" dated June 27, 2013.

In addition, Joint Electronic Health Record Interoperability (JEHRI) and Virtual Lifetime Electronic Record (VLER) Health (to include Exchange) are part of the DMIX program as a direct result of the Acquisition Decision Memorandum (ADM) signed January 2, 2014 by the Under Secretary of Defense for Acquisition, Technology and Logistic (USD AT&L). Use of the health data may be done via legacy systems, clinical mobile applications and system agnostic viewers such as the Joint Legacy Viewer (JLV). Customers include the MHS, VA, other federal agencies and over 200,000 medical care practitioners.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2016	FY 2017	FY 2018
Title: Defense Medical Information Exchange (DMIX) Program	10.157	0.000	0.000
<b>Description:</b> Comprised of the infrastructure and services needed to provide seamless integrated sharing of electronic health data between the DoD, VA, other Federal agencies, and private sector partners that is viewable to DoD and VA providers through a joint viewer.			
FY 2016 Accomplishments:			

Exhibit R-2A, RDT&E Project Justification: FY 2018 De	fense Health Agency	Date:	May 2017		
Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0605039DHA I PE 0605039HP / DoD Medical Information Exchange and Interoperability	Project (Number/Name) 458A I DoD Medical Information Excland Interoperability / Defense Medical Information Exchange (DMIX)			
· · ·	teroperability and Test Command (JITC) Certificate of Net-worthin and Cooperative Vulnerability and Penetration Assessment (CV		FY 2017	FY 2018	
FY 2017 Plans: No Funding Programmed.					
FY 2018 Plans: No Funding Programmed.					
	Accomplishments/Planned Programs Sul	ototals 10.15	0.000	0.000	

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

			FY 2018	FY 2018	FY 2018				Cost	: <u>To</u>
<u>Line Item</u>	FY 2016	FY 2017	<b>Base</b>	<u>000</u>	<u>Total</u>	FY 2019	FY 2020	FY 2021	FY 2022 Compl	ete Total Cost
• BA-1, 0807788HP:	56.348	56.706	44.743	-	44.743	46.951	47.508	46.794	47.731 Continu	ing Continuing

DoD Medical Information
Exchange and Interoperability

#### 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 reguired as a result of periodic program reviews or major decisions.

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

### **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.