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

Appropriation/Budget Activity

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

R-1 Program Element (Number/Name)

PE 0605026DHA I Information Technology Development - DoD Healthcare Management System Modernization (DHMSM)

Date: May 2017

| 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 | 88.744 | 362.788 | 298.623 | 42.549 | - | 42.549 | 10.326 | 10.071 | 10.743 | 10.478 | Continuing | Continuing |
| 483A: Information Technology Development - DoD Healthcare Management System Modernization (DHMSM) at DHA | 88.744 | 362.788 | 298.623 | 42.549 | - | 42.549 | 10.326 | 10.071 | 10.743 | 10.478 | 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- 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:

- 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 2016 | FY 2017 | FY 2018 Base | FY 2018 OCO | FY 2018 Total |
|---|---------|---------|--------------|-------------|---------------|
| Previous President's Budget | 438.376 | 298.623 | 42.549 | - | 42.549 |
| Current President's Budget | 362.788 | 298.623 | 42.549 | - | 42.549 |
| Total Adjustments | -75.588 | 0.000 | 0.000 | - | 0.000 |
| Congressional General Reductions | - | - | | | |
| Congressional Directed Reductions | - | - | | | |
| Congressional Rescissions | - | - | | | |
| Congressional Adds | - | - | | | |
| Congressional Directed Transfers | - | - | | | |
| Reprogrammings | -42.005 | - | | | |
| SBIR/STTR Transfer | -33.583 | - | | | |
| | | | | | |

| Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Defense Health Age | ency | Date: May 2017 |
|--|--|-------------------------------|
| Appropriation/Budget Activity | R-1 Program Element (Number/Name) | |
| 0130: Defense Health Program I BA 2: RDT&E | PE 0605026DHA I Information Technology Development | t - DoD Healthcare Management |
| | System Modernization (DHMSM) | |

Change Summary Explanation

FY 2016: Prior approval reprogramming from Defense Health Program, Research, Development, Test and Evaluation (DHP RDT&E), Program Element (PE) 0605026-Information Technology Development - DoD Healthcare Management System Modernization (DHMSM) (-\$42.005 million) to DHP RDT&E, PE Joint Operational Medicine Information System (JOMIS) (+\$42.005 million).

FY 2016: Realignment from Defense Health Program, Research, Development, Test and Evaluation (DHP RDT&E), Program Element (PE) 0605026 DoD Healthcare Management System Modernization (DHMSM) (-\$33.583 million) to DHP RDT&E, PE 0605502-Small Business Innovation Research (SBIR) / Small Business Technology Transfer (STTR) Program (+\$33.583 million).

FY 2017: No change

FY 2018: No change

| Exhibit R-2A, RDT&E Project Just | stification: | FY 2018 D | efense Hea | alth Agency | | | | | | Date: May | 2017 | |
|---|----------------|-----------|------------|-----------------|---|------------------|---------|---------|---|-----------|---------------------|---------------|
| Appropriation/Budget Activity 0130 / 2 | | | | | R-1 Program Element (Number/Name) PE 0605026DHA I Information Technology Development - DoD Healthcare Management System Modernization (DHMSM) | | | | Project (Number/Name) 483A I Information Technology Development - DoD Healthcare Management System Modernization (DHMSM) at DHA | | | |
| 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 |
| 483A: Information Technology Development - DoD Healthcare Management System Modernization (DHMSM) at DHA | 88.744 | 362.788 | 298.623 | 42.549 | - | 42.549 | 10.326 | 10.071 | 10.743 | 10.478 | Continuing | Continuing |
| Project MDAP/MAIS Code: 496 | | | | | | 1 | Į. | | | | 1 | 1 |

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- 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: (1) clinical workflow and provider clinical decision support; (2) capture, maintain, use, protect, preserve and share health data and information; (3) 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 (4) analysis and management of health information from multiple perspectives to include population health, military medical readiness, clinical quality, disease management, and medical research.

| B. Accomplishments/Planned Programs (\$ in Millions) | FY 2016 | FY 2017 | FY 2018 | |
|--|---------|---------|---------|--|
| Title: DoD Healthcare Management System Modernization (DHMSM) Program | 362.788 | 298.623 | 42.549 | |
| Description: 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. | | | | |
| FY 2016 Accomplishments: FY16 Accomplishments include the development of the Detailed Government Test Plan, Reviewed vendor Test Cases, conducting 12 Test Integration Work Groups (TIWG) to work with external Test Agencies and Stakeholders on test planning efforts. In addition, this program started contractor led Configuration and Integration Testing (CIT) of EHR system, completed the development of Implementation Plan which will be utilized for Go-Live of the EHR at the Initial Operational Capability (IOC) | | | | |

| Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense | Health Agency | | Date: M | ay 2017 | | |
|--|--|----------------------------------|---------|---------|---------|--|
| Appropriation/Budget Activity 0130 / 2 | PE 0605026DHA I Information Technology Development - DoD Healthcare Management System Modernization (DHMSM) 48 Continuous Automation Technology Automati | | | | | |
| B. Accomplishments/Planned Programs (\$ in Millions) | | FY | 2016 | FY 2017 | FY 2018 | |
| locations in the Pacific Northwest, managed selection of medica testing of medical and peripheral devices in the Fixed Facility G | | ıd | | | | |
| Prepared analyses and documentation for and conducted multi- Conducted multiple engineering and readiness reviews, continuous oversight. | | ment | | | | |
| FY 2017 Plans: In FY17, continued plans include the support the continued softwith the modernized EHR. This includes direct coordination with and test execution support. In addition, plans are to conduct Sy Review (FDR) in support of scheduled Limited Fielding for IOC of Operational Test Readiness review and execute Operational As long lead procurement efforts for the Go-Live of multiple Military accordance with the Milestone Decision Authority approved sch | h Interface Partners for interface control document development rstem Engineering Technical Review 3 (SETR) Final Design Authority to Proceed, the Segment 1 Test Readiness, conducts resessment and Operational Test of Segment 1, support the ratio Treatment Facilities (MTFs) post Full Deployment Decision i | ent | | | | |
| Other plans include the operation and maintenance of the DHM activities, software license maintenance, hardware refresh, systapplicable and continued business management operations and | em hosting, and recurring change management and training | | | | | |
| FY 2018 Plans: For FY18, plans include the continued support for configuration configuration at the IOC sites, completing system updates, testil Initial Operational Test & Evaluation (IOT&E), and addressing a during limited fielding for IOC. This will be done by the purchast of the modernized DHMSM EHR to Military Treatment Facilities by the Milestone Decision Authority (MDA); deployment activities and on-site deployment support for multiple Wave Deployments DHMSM system, including recurring configuration, integration, asystem hosting, and recurring change management and training | ng, integration and deployment in response to the results of the difference of the d | 1 EHR ments roved ities | | | | |
| | | totals 3 | 362.788 | 298.623 | 42.54 | |

| Exhibit R-2A, RDT&E Project Justi | fication: FY | 2018 Defens | se Health Ag | jency | | | | | Date: Ma | ıy 2017 | | |
|--|------------------|-------------|--------------|---|--------------|---------|---------|---------|-----------------------|----------------|------------|--|
| Appropriation/Budget Activity 0130 / 2 | | | | R-1 Program Element (Number/Name) PE 0605026DHA I Information Technology Development - DoD Healthcare Management System Modernization (DHMSM) | | | | | Project (Number/Name) | | | |
| C. Other Program Funding Summa | ary (\$ in Milli | ions) | | | | | | | | | | |
| | | | FY 2018 | FY 2018 | FY 2018 | | | | | Cost To | | |
| Line Item | FY 2016 | FY 2017 | Base | oco | <u>Total</u> | FY 2019 | FY 2020 | FY 2021 | FY 2022 | Complete | Total Cost | |
| • BA-1, PE 0807787: <i>DoD</i> | 63.130 | 129.969 | 203.725 | - | 203.725 | 246.122 | 317.228 | 340.071 | 354.515 | Continuing | Continuing | |
| Healthcare Management Systems | | | | | | | | | | | | |
| • BA-3, PE 0807787: Information | 0.000 | 29.468 | 499.193 | - | 499.193 | 547.160 | 532.476 | 474.888 | 266.526 | Continuing | Continuing | |
| Technology Development and | | | | | | | | | | • | | |
| Sustainment - DoD Healthcare | | | | | | | | | | | | |

Remarks

D. Acquisition Strategy

Management System Modernization

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

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. The results of these measurements are presented to management on a regular basis in various as part of the Integrated Product and Process Development (IPPD) process, In Process Reviews (IPRs), or other reviews to determine program effectiveness and provide new direction as needed to ensure the efficient use of resources are also used.