



**VA ELECTRONIC HEALTH RECORD MODERNIZATION
(EHRM) SYSTEM
PERFORMANCE WORK STATEMENT (PWS)
DEPARTMENT OF VETERANS AFFAIRS**

Office of Electronic Health Record Modernization (OEHRM)

EHRM Software Development

Date: August 4, 2020

Task Order PWS Version Number: 1.3

Contents

1.0	BACKGROUND.....	3
2.0	APPLICABLE DOCUMENTS.....	3
3.0	SCOPE OF WORK.....	3
3.1	APPLICABILITY	4
3.2	ORDER TYPE.....	4
4.0	PERFORMANCE DETAILS.....	4
4.1	PERFORMANCE PERIOD.....	4
4.2	PLACE OF PERFORMANCE.....	4
4.3	TRAVEL OR SPECIAL REQUIREMENTS.....	4
4.4	CONTRACT MANAGEMENT.....	4
4.5	GOVERNMENT FURNISHED PROPERTY.....	5
4.6	SECURITY AND PRIVACY.....	5
4.6.1	POSITION/TASK RISK DESIGNATION LEVEL(S)	6
5.0	SPECIFIC TASKS AND DELIVERABLES.....	6
5.1	PROJECT MANAGEMENT.....	6
5.1.1	CONTRACTOR PROJECT MANAGEMENT PLAN.....	6
5.1.2	REPORTING REQUIREMENTS	6
5.1.3	TECHNICAL KICKOFF MEETING	7
5.2	CERNER INTERNAL SOFTWARE PLANNING, DESIGN AND DEVELOPMENT.....	7
5.2.1	PLANNING	7
5.2.2	CERNER INTERNAL SOFTWARE DEVELOPMENT.....	9
5.3	DENTAL FUNCTIONAL PLANNING, DESIGN AND DEVELOPMENT.....	10
5.3.1	DENTAL FUNCTIONAL PLANNING AND DESIGN	10
5.3.2	DENTAL DEVELOPMENT	11
5.4	EHRM SOFTWARE VALIDATION, ACCEPTANCE AND SUSTAINMENT.....	13
5.4.1	VALIDATION	13
5.4.2	ACCEPTANCE AND SUSTAINMENT	14
5.5	DENTAL PILOT DEPLOYMENT	15
5.6	ADDITIONAL SOFTWARE DEVELOPMENT SUPPORT (OPTIONAL TASK).....	16
6.0	GENERAL REQUIREMENTS.....	16
6.1	PERFORMANCE METRICS	16
6.2	SECTION 508 –INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) STANDARDS	17
6.2.1	REPRESENTATION OF CONFORMANCE	17
6.2.2	ACCEPTANCE AND ACCEPTANCE TESTING.....	18
6.3	SHIPMENT OF HARDWARE OR EQUIPMENT	18
6.4	ORGANIZATIONAL CONFLICT of INTEREST	18
6.5	DELIVERABLES	19

1.0 BACKGROUND

The mission of the Department of Veterans Affairs (VA) is to provide benefits and services to Veterans of the United States. In meeting these goals, VA strives to provide high quality, effective, and efficient Information Technology (IT) services to those responsible for providing care to the Veterans at the point-of-care as well as throughout all the points of the Veterans' health care in an effective, timely and compassionate manner. VA depends on Information Management/Information Technology (IM/IT) systems to meet mission goals.

On May 17, 2018, VA entered into a ten-year indefinite-delivery, indefinite-quantity (ID/IQ) sole-source contract with Cerner Government Services, Inc. (Cerner) to acquire the Electronic Health Record (EHR) system being deployed by the Department of Defense (DoD) and related services for deployment and transition across the VA enterprise in a manner that meets VA needs, and which will enable seamless healthcare to Veterans and qualified beneficiaries. Procurement of a single common system across VA and DoD shall achieve VA's goal of seamless care for Veterans by facilitating the transition of active duty military members to VA and improving their timely access to the highest quality of care.

Cerner's EHR solution shall provide VA with a single system that can store and retrieve administrative, clinical, laboratory, radiology, pharmacy and scheduling data, and can interact with other internal and external systems. Modernization of VA's EHR will support a Veteran-centric, team-based care model, with modern decision support tools; clinical information content services; identification, communication and standardization of care paths; and resource provisioning. This will improve interoperability, performance, and user experience for the majority of the health care delivery and ancillary teams responsible for directly or indirectly providing health care services; and in turn will improve quality, safety, and timeliness of health care services delivered to Veterans.

Cerner shall provide a comprehensive EHR solution and services as specifically defined in the EHRM Basic contract. This Task Order (TO) requires EHRM software development to address requirements in functional areas such as clinical, dental and revenue cycle to match EHRM capabilities to VA-specific requirements.

2.0 APPLICABLE DOCUMENTS

The documents in Paragraph 3.0 in the EHRM Basic PWS apply to the performance of this effort, there are no additional referenced documents.

3.0 SCOPE OF WORK

The Contractor shall provide EHRM software development, testing and execution in support of data migrations required for EHRM IOC. These tasks include:

- a. Project Management

EHRM Software Development

- b. Cerner Internal Software Functional Design and Development
- c. Cerner Third-party Dental Functional Planning, Design and Development
- d. Software Test, Development and Sustainment
- e. Dental Pilot Deployment
- f. Additional Software Development Support

3.1 APPLICABILITY

This Task Order (TO) PWS is within the scope of paragraphs 5.1 Project Management, 5.5.3 EHRM and VA System Integration, 5.5.8 Test and Evaluation, 5.6.11 Test and Evaluation – Deployment, and 5.10 Innovation and Enhancements of the EHRM Basic PWS.

3.2 ORDER TYPE

The effort shall be proposed on a Firm Fixed Price (FFP) basis.

4.0 PERFORMANCE DETAILS

4.1 PERFORMANCE PERIOD

The period of performance (PoP) shall be 24 months from the date of award, with one optional task that can be exercised multiple times during the period of performance.

4.2 PLACE OF PERFORMANCE

Efforts under this TO shall be performed both in Contractor facilities, as well as VA facilities. Program meetings may also be held at VA Central Office, some of which may require in person attendance. Project management activities that occur at the enterprise level shall be performed at Contractor facilities.

4.3 TRAVEL OR SPECIAL REQUIREMENTS

The Government anticipates travel to perform the tasks associated with the effort, as well as to attend program-related meetings or conferences throughout the PoP. Include all estimated travel costs in your firm-fixed price line items. These costs will not be directly reimbursed by the Government.

The total estimated number of trips for this effort shall be proposed by the Contractor. Anticipated locations include, but are not limited to, Washington, DC.

4.4 CONTRACT MANAGEMENT

All requirements of Section 9.0 of the EHRM Basic PWS apply to this effort. This TO shall be addressed in the Contractor's Monthly Progress Report as set forth in the EHRM Basic contract.

4.5 GOVERNMENT FURNISHED PROPERTY

The Government has multiple remote access solutions available to include Citrix Access Gateway (CAG), Site-to-Site Virtual Private Network (VPN), and RESCUE VPN.

The Government's issuance of Government Furnished Equipment (GFE) is limited to Contractor personnel requiring direct access to the network to: development environments; install, configure and run Technical Reference Model (TRM) approved software and tools (e.g., Oracle, Fortify, Eclipse, SoapUI, WebLogic, LoadRunner); upload/download/ manipulate code, run scripts, and apply patches; configure and change system settings; check logs, troubleshoot/debug, and test/QA.

When necessary, the Government will furnish desktops or laptops, for use by the Contractor to access VA networks, systems, or applications to meet the requirements of this PWS. The overarching goal is to determine the most cost-effective approach to providing needed access to the VA environment coupled with the need to ensure proper Change Management principles are followed. Contractor personnel shall adhere to all VA system access requirements for on-site and remote users in accordance with VA standards, local security regulations, policies and rules of behavior. GFE shall be approved by the Contracting Officer's Representative (COR) and Program Manager (PM) on a case-by-case basis prior to issuance.

Based upon the Government assessment of remote access solutions and requirements of this TO, the Government estimates that the following GFE will be required by this effort:

Standard laptops: 2
Developer laptops: 35

The Government will not provide IT accessories including but not limited to Mobile Wi-Fi hotspots/wireless access points, additional or specialized keyboards or mice, laptop bags, extra charging cables, extra Personal Identity Verification card readers, peripheral devices, or additional Random Access Memory (RAM). The Contractor is responsible for providing these types of IT accessories in support of this effort as necessary and any VA installation required for these IT accessories shall be coordinated with the COR.

4.6 SECURITY AND PRIVACY

All requirements in Section 7.0 of the EHRM Basic PWS apply to this effort.

It has been determined that protected health information may be disclosed or accessed and a signed Business Associate Agreement (BAA) shall be required. The Contractor shall adhere to the requirements of the BAA executed between OEHRM and Cerner Corporation; and shall comply with VA Directive 6066 and VHA Handbook 1605.05.

4.6.1 POSITION/TASK RISK DESIGNATION LEVEL(S)

The position sensitivity and the level of background investigation commensurate with the required level of access for all PWS tasks is Tier3/Non-Critical Sensitive in accordance with Section 8.7 of the EHRM Basic PWS.

The Tier3/Non-Critical Sensitive Position Sensitivity and Background Investigation requirements identify, in effect, the Background Investigation requirements for Contractor individuals, based upon the tasks the particular Contractor individual will be working. The submitted Contractor Staff Roster must indicate the required Background Investigation Level for each Contractor individual based upon the tasks the Contractor individual will be working, in accordance with their submitted proposal.

5.0 SPECIFIC TASKS AND DELIVERABLES

The Contractor shall perform the following:

5.1 PROJECT MANAGEMENT

5.1.1 CONTRACTOR PROJECT MANAGEMENT PLAN

The Contractor shall deliver a Contractor Project Management Plan (CPMP) that lays out the Contractor's approach, timeline and tools to be used in execution of this TO effort. The CPMP should take the form of both a narrative and graphic format that displays the schedule, milestones, risks and resource support. The CPMP shall also include how the Contractor shall coordinate and execute planned, routine, and ad hoc data collection reporting requests as identified within the PWS. The initial baseline CPMP shall be concurred upon and updated in accordance with Section B of the TO. The Contractor shall update and maintain the VA Program Manager (PM) approved CPMP throughout the PoP.

Deliverable:

- A. Contractor Project Management Plan

5.1.2 REPORTING REQUIREMENTS

The Contractor shall provide a Monthly Progress Report in accordance with Section 9.6.1.1 of the EHRM Basic PWS. The Monthly Progress Report shall include status and timelines on all software development efforts completed, in development and in the pipeline. The Monthly Progress Report shall be divided into separate sections for each development effort underway to facilitate review by VA content owners.

EHRM Software Development

For all deliverables throughout this TO, Wiki links are not acceptable. The Contractor shall provide a detailed project schedule within 45 days after TO award. This schedule will be updated monthly.

Deliverable:

- A. Monthly Progress Report

5.1.3 TECHNICAL KICKOFF MEETING

The Contractor shall hold a technical kickoff meeting within 10 days after TO award. The Contractor shall present, for review and approval by the Government, the details of the intended approach, work plan, and project schedule for each effort. The Contractor shall specify dates, locations (can be virtual), agenda (shall be provided to all attendees at least five calendar days prior to the meeting), and meeting minutes (shall be provided to all attendees within three calendar days after the meeting). The Contractor shall invite the Contracting Officer (CO), Contract Specialist (CS), COR, and the VA PM.

5.2 CERNER INTERNAL SOFTWARE PLANNING, DESIGN AND DEVELOPMENT

5.2.1 PLANNING

The Contractor shall provide a Cerner Internal Software Development Timeline for identified software projects in the pipeline for VA review and approval. The Contractor shall maintain the timeline to reflect the current state and evolving priorities. The timeline shall include a cumulative list of all projects completed, underway and planned.

The Contractor shall provide input to the OEHRM - maintained software development list to reflect the current status of all project development work underway.

The following initial list of software development projects has been initially sized for development. All development projects shall follow the development and test processes outlined in PWS section 5.3 below. Training and change management content development for new Cerner internal software capabilities will be accomplished under a separate TO.

RVD	Title	Description
708	JHIE Patient Identity Double Check	Confirmationidentity check when an external partner finds a veteran in medical record
690	JHIE Ability to turn off Pre-Fetch	Specify pre-fetch only for partners that have the capability

EHRM Software Development

697	JHIE Hard refresh to force outbound query when cached is insufficient	Re-query all partners if cache does not have most recent info for a given patient
306	Data quality for interoperability services - Diameter Health	Copy patient records from Cerner HIE to Diameter Health data quality tool after filtering records unique to DoD
231	Accept health plan notifications	Changes in a veteran's VHAP (retroactive and current) will be supplied to Millennium for Rev Cycle to drive appropriate workflows and notifications to users to review and update encounters appropriately.
702	SC/SA visible to rev cycle	Service connection/Special Authority visibility to users with appropriate access where charges are reviewed
237	Update direct booking insurance selection	Provides configuration to remove the person level insurance defaults, to allow default insurance profiles based on appointment type and to allow for a user-driven process to determine the appropriate insurance profile for the associated encounter.
543	VDIF co-pay synch	Sharing of veteran long term care and inpatient copayment data between VistA and Millennium so that members are billed correctly.

A development project may be based on a single or multiple capability statements or Requirements Validation Documents (RVDs). The Contractor shall combine capabilities or RVDs into project(s) as appropriate to maximize development efficiency. For each project to be developed, the Contractor shall review and fine-tune requirements to create a Functional Design Document including:

- Supporting capability statement(s)/RVDs
- Project functional description including workflow design decision matrix (DDM)
- Project development timeline, level of effort, and detailed pricing

The current listing of potential software projects considered for development is included in Attachment A to this PWS: Software Development Backlog. These items may be

EHRM Software Development

added, dropped, or reprioritized by the VA PM as analysis continues. The Contractor shall identify a team lead/single POC for each project.

Deliverable:

- A. Cerner Internal Software Development Timeline
- B. Functional Design Document

5.2.2 CERNER INTERNAL SOFTWARE DEVELOPMENT

The Contractor shall execute Cerner Internal Software Development, as identified in this section for each of the projects that are selected for development by VA. Upon VA acceptance of a project and TO modification, the Contractor shall initiate development tasks subject to the not-to-exceed (NTE) CLIN ceiling.

Upon VA acceptance of the Functional Design Document for an individual project, the Contractor shall initiate development efforts as described below.

The Contractor shall develop and test according to the domain strategy required for each EHRM capability.

For each requirement, the Contractor shall provide functionality demonstration or reviews during development to enable the Government to provide feedback and approval that development completed to date and remaining planned functionality meets VA needs. The Contractor shall propose the schedule for these milestone-based demos/reviews appropriate to each individual development effort. These reviews shall include a Milestone Completion report documenting milestone activities and results. For each project, the Contractor shall include status on progress against each milestone in the Monthly Progress Report.

The Contractor shall design, develop and test enterprise level solutions using repeatable, agile software and system engineering processes. Across all development projects, the Contractor shall perform a set of common activities to include, but not limited to: 1) conducting a detailed assessment of the technical requirements, 2) identifying standard and/or specialized security and privacy requirements, 3) analyzing and characterizing data interchange requirements, 4) development and testing, and, 5) monitoring performance and scalability goals.

The Contractor shall identify any project that requires development of a new interface with VA legacy or external partner. Training and change management content as well as new interfaces will be developed under a separate Task Order.

Deliverables:

- A. Milestone Completion Report

5.3 DENTAL FUNCTIONAL PLANNING, DESIGN AND DEVELOPMENT

The Contractor shall provide new user interface (UI) development for Dental modules: Clinical Charting, Periodontal Charting, Clinical Notes, Treatment Planner, Quick Exam and 15 assessments. The Contractor shall provide deployment services for the Pilot site to replace DRM+ with the Millennium Dental solution leveraging enhanced Dentrix Enterprise, including the new user interface.

RVD	Title	Description
636	Dental User Interface	UI features including 5 clinical modules (treatment planner, charting, periodontal charting, quick exam and clinical notes) and 15 assessments

5.3.1 DENTAL FUNCTIONAL PLANNING AND DESIGN

The Contractor shall provide a Millennium Dental Development Timeline for the Dental User Interface and related Dental Solution developed capabilities. The Contractor shall maintain the timeline to reflect progress of the development schedule.

VA Dentistry Council engagement during new solution software development lifecycle for User Interface and assessments to provide timely feedback, needed attributes and other design answers is important to the design and development success of the effort to be prepared for deployment. VA Cross-Council availability during National Workshops and other joint sessions to address workflow changes due to clinical flows moving from DRM+ to DXE is also important to ensure successful transition to the Millennium Dental Solution. The Contractor shall provide event agendas, schedules, and needs of all invited participants within three days of events focused on the Millennium Dental Solution.

The Contractor shall support workflows as described in Dental Enhanced User Interface and Pilot. Specifically, the Contractor shall:

- a. Provide workflow design, build and configuration support in response to new or changed workflows resulting from such items as: additional functionality/purchased solutions, national workflow modifications, or workflow optimization.
- b. Maintain and optimize workflows to meet VA-specific requirements as appropriate under direction of Dental Council.
- c. Develop new content as required and provide content management oversight as well as tools to generate and curate workflow data.

EHRM Software Development

- d. Provide updated traceability matrix of the RTM functional requirements to EHRM enterprise workflows. Provide updated traceability matrix as applicable of any non-functional requirement to the EHRM enterprise workflows.

The Contractor shall continue to update the enterprise, national/Agency-wide and local baseline design and build to reflect VA requirements identified through design workshops with VA. This system will be further localized in future task orders around individual site deployment.

The Contractor shall conduct a series of workshops to verify design, and build the enterprise, national/Agency-wide, and local baseline. This will be done through a series of workshops to iteratively design, build, and validate configuration and workflows.

The Contractor shall:

- a. Verify and document new/changing design decisions in Design Decision Matrices including decisions on whether to adopt or modify MHS GENESIS and/or Model design decisions for solutions implemented by MHS GENESIS as well as solutions that have not been implemented by DOD.
- b. Configure enterprise, national/agency-wide and local build for all solutions and demonstrate the configuration and workflows to the EHRM VA Clinical Councils.
- c. Summarize all changes such that VA can communicate summary of workflow changes to clinicians, users and testers in the Monthly EHRM Design and Build Status Report.
- d. Recommend and implement standardized user position profiles for VA users for new workflows as required.
- e. Update training plan and materials on end-user role assignment for new workflows as required.

The Contractor shall report status, issues and risks in a Monthly Progress Report.

Deliverables:

- A. Design Decision Matrices as applicable

5.3.2 DENTAL DEVELOPMENT

The Dentistry Council participates in user experience reviews and development checkpoints to provide feedback as input into the development process. Additional council input, not identified in planned scope as defined in the attached Requirements Validation Document (RVD), shall be assessed jointly with VA to determine feasibility to support in current or future development schedules.

EHRM Software Development

The Contractor shall develop and test according to domain strategy Millennium Dental capabilities required for EHRM. Development shall follow the development and test processes outlined below. The Contractor shall:

- a. Create training and change management content development for updated Millennium Dental capabilities as part of the Pilot implementation.
- b. Conduct historical data conversion between VA DRM+ to Millennium Dental solution (DXE) for the Pilot site. Update the Change Management strategy to include change management efforts required to support deployment and sustainment for the Dental Pilot.
- c. Create Train the Trainer courses to prepare trainers with the Millennium Dental Solution materials.
- d. Plan end user training onsite at the Pilot location.

Development includes a new user interface, assessments, user experience enhancements and improved capabilities to improve support of the requirements traceability matrix.

The Contractor shall identify a team lead/single POC for the Millennium Dental development.

The Contractor shall provide user experience reviews, functionality demonstration or other reviews during design and development to enable the Government to provide feedback. VA Dentistry Council feedback is collected during each user experience review. The Contractor shall determine feasibility of each feedback item, maintain status in the Feedback Tracker and report back Couuses of Action (COA's) that may include configuration, training, or guidance to utilize the RTM Clarification Process. These user experience reviews shall follow the milestone review schedule provided as part of the VA Dentistry Council Engagement Calendar, and shall be shared weekly to the council. For the dental project, the Contractor shall include status on progress against each milestone in the Monthly Progress Report.

At the conclusion of a sprint cycle or at a time otherwise agreed upon with the Dentistry Council, the Contractor shall provide a development checkpoint, that may include a demo of the capability to date will be provided to VA SMEs for that area to ensure the solution being developed meets VA needs. The Contractor shall propose the schedule for these milestone-based demos/reviews for VA review and approval. These reviews shall include a Milestone Completion report documenting milestone activities and results. Development checkpoints may also include design questions, additional mock-ups, and other requests to the VA SMEs as input into the development process. VA Dentistry Council feedback shall be collected during each development checkpoint. The Contractor shall determine feasibility of each feedback item, maintain status in the Feedback Tracker and report back COA's that may include configuration, training, or guidance to utilize the RTM Clarification Process. These development checkpoints shall follow the milestone review schedule provided as part of the VA Dentistry Council Engagement Calendar, which shall be shared weekly to the council.

EHRM Software Development

The Contractor shall design, develop and test enterprise level solutions using repeatable, agile software and system engineering processes. For the development project, the Contractor shall perform a set of common activities(Milestones) to include but not limited to: 1) conducting a detailed assessment of the technical requirements, 2) identifying standard and/or specialized security and privacy requirements, 3) analyzing and characterizing data interchange requirements, 4) development and testing, and, 4) monitoring performance and scalability goals.

The Contractor shall identify if the Dental project requires development of a new interface with VA legacy or external partner. All new interfaces will be developed under a separate Task Order.

Deliverables:

- A. Milestone Completion Report

5.4 EHRM SOFTWARE VALIDATION, ACCEPTANCE AND SUSTAINMENT

5.4.1 VALIDATION

The Contractor shall provide developed software for testing and deployment. The Contractor shall:

- a. Execute Contractor Master Test and Evaluation Plan by conducting the tests and evaluations as described for capability requirements. This shall include system, integration and end-to-end testing.
- b. Execute testing according to Contractor IP processes as required, to validate the VA functional and non-functional requirements have been met. Internal Contractor IP testing is not recorded in the OEHRM testing repository.
- c. Execute, as applicable, VA integration testing and VA acceptance testing activities. For these activities, the Contractor shall:
 - 1. provide updates to testing artifacts including Test Cases, Test Execution and Test Findings to the Application Lifecycle Management (ALM) tool suite.
 - 2. Provide support for VA Test and Evaluation including items such as VA participation in test and evaluations defects/issues resolution process, assistance in troubleshooting/triaging, jointly troubleshooting issues and responding to findings from test and evaluation activities.
- d. Conduct system performance testing and monitoring to ensure scalability, reliability, and availability of the product.
- e. Test and validate development project requirements in both non-production and production environments, as applicable, as outlined in the Master Test Plan and in accordance milestone delivery schedule.

EHRM Software Development

- f. Produce a Contractor IP Test Analysis Summary Report which summarizes the results of the contractor-led testing activities such as summary of the test approach, test execution and summary of findings for the contractor testing executed including, but not limited to system, integration validation, medical device testing, end-to-end integration test, etc.. OEHRM Test and Evaluation will provide the template for the Contractor IP Test Analysis Summary Report

The Contractor shall provide the status of the test and evaluation services within this task order as part of the monthly test and evaluation monthly status report in the Project Management TO.

Deliverables:

- A. Contractor IP Test Analysis Summary Report

5.4.2 ACCEPTANCE AND SUSTAINMENT

Upon completion of functional acceptance testing of each capability, the Contractor shall elicit VA PM and Business Owner approval and joint governance approvals, as necessary, to indicate functionality performs according to the approved design and without defects. The Contractor shall document approvals in a VA-Specific Functional Test Acceptance Memos indicating VA validation of functionality and authority to proceed to deployment. The Acceptance Memos may be completed by individual requirement, or collectively, as necessary to optimize software release according to an agreed release schedule.

For each project, the Contractor shall propose a plan for inclusion in an upcoming Product Build Release. Upon completion of each development project, the Contractor shall provide sustainment, defect management support and coordination throughout the PoP of this TO and/or for 90 days after deployment of the capability whichever comes first. Continued support of all code developed will be incorporated in following Sustainment/Operations TOs.

As requested, the Contractor shall conduct a Pre-Go-Live Review for each project with development project stakeholders outlining the enterprise-wide and site-specific pre-deployment activities, and the tasks, responsibilities and support required from VA during go-live and in accordance with the VA-approved Deployment Plan. The site-specific project development implementation pre-deployment activities will align with the VA-approved Deployment Plan as appropriate. Following the Review, the Contractor shall obtain official VA Go-Live Authorization by obtaining approvals from the key stakeholders including:

- a. VA Test Lead
- b. Site Lead – for site-specific development
- c. Enterprise Clinical Lead – for enterprise

Deliverables:

EHRM Software Development

A. Functional Test Acceptance Memo

5.5 DENTAL PILOT DEPLOYMENT

The Contractor shall provide Delivery Services to implement the replacement of DRM+ with the Millennium Dental solution leveraging enhanced Dentrix Enterprise with the enhanced user interface.

Upon approval of the pilot site by VA OEHRM CMO, the Contractor shall initiate the Millennium Dental Pilot Deployment. It is anticipated that this pilot deployment will have a staggered start from the EHRM schedule with the Dental Pilot Go Live approximately 5 months after the EHRM Go Live or based on VA-approved schedule.

The Pilot deployment shall include the following Events and Event assumptions. Quantity and increments shall be agreed upon with OEHRM CMO. The single Pilot Wave has an estimated planned duration of 20 months and shall not exceed the task orders overall PoP.

Event	Quantity	Increments	More Info
Kickoff	1	3 days	
Site Visit (If Required)	1	3 days	Only needed if significant changes since EHRM deployment or new clinics opening
National Workshops	4	3 days	
Pilot Local Workshops	3	3 days	**Mon/Fri travel dates
Between Workshops	NA	5 weeks	
IV1	1	2 weeks	
IV2	1	2 weeks	
Between IV1 and IV2	NA	7 weeks	
End User Training	2 weeks	7 weeks	**Training is typically onsite
EUT before Go live	NA	1 week	
Formal Functional Testing from IV1 Start	1	5 weeks	

EHRM Software Development

Formal Interface Testing from IV1 Start	1	8 weeks	
Formal 508 Testing from IV1 Start	1	4 weeks	
Go Live	1	5 days	Does not include elbow support
Health Check	1	7 weeks	

Deliverables:

- A. Dental National and Local Workshop High Level Agendas

5.6 ADDITIONAL SOFTWARE DEVELOPMENT SUPPORT (OPTIONAL TASK)

Software development requirements continue to evolve to meet VA priorities and may require completion of additional projects throughout the PoP of this Task Order. VA may exercise this optional task for additional projects following the applicable processes described in Sections 5.2 and 5.3 of this PWS. This optional task may be exercised multiple times throughout the period of performance for a total amount not to exceed the Contract Line Item (CLIN) ceiling.

6.0 GENERAL REQUIREMENTS

6.1 PERFORMANCE METRICS

The table below defines the Performance Standards and Acceptable Levels of Performance associated with this effort. The Government may also utilize the commercially available and VA-specific Key Performance Indicators (KPIs) and Service Level Agreements (SLAs) defined at the ID/IQ level to measure performance under this TO, as applicable.

Performance Objective	Performance Standard	Acceptable Levels of Performance
A. Technical / Quality of Product or Service	<ol style="list-style-type: none"> 1. Shows understanding of requirements 2. Efficient and effective in meeting requirements 3. Meets technical needs and mission requirements 4. Provides quality services/products 5. Meets performance thresholds/metrics 	Satisfactory or higher

EHRM Software Development

Performance Objective	Performance Standard	Acceptable Levels of Performance
	defined in applicable Service Level Agreements	
B. Project Milestones and Schedule	<ol style="list-style-type: none"> 1. Quick response capability 2. Products completed, reviewed, delivered in accordance with the established schedule 3. Notifies customer in advance of potential problems 	Satisfactory or higher
C. Staffing	<ol style="list-style-type: none"> 1. Currency of expertise and staffing levels appropriate 2. Personnel possess necessary knowledge, skills and abilities to perform tasks 	Satisfactory or higher
D. Invoicing	<ol style="list-style-type: none"> 1. Invoices are current, accurate, and complete. 	Satisfactory or higher
E. Management	<ol style="list-style-type: none"> 1. Integration and coordination of all activities to execute effort 	Satisfactory or higher

The COR will utilize a QASP throughout the life of the TO to ensure that the Contractor is performing the services required by this PWS in an acceptable level of performance. The Government reserves the right to alter or change the QASP at its own discretion. A Performance Based Service Assessment will be used by the COR in accordance with the QASP to assess Contractor performance.

6.2 SECTION 508 –INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) STANDARDS

All requirements in Sections 8.10, including subparagraphs, of the EHRM Basic PWS apply to this effort. Deliverable requirements are further defined in the following subparagraphs. The Contractor shall comply with the technical standards at: <https://www.access-board.gov/guidelines-and-standards/communications-and-it/about-the-ict-refresh/final-rule/single-file-version>

6.2.1 REPRESENTATION OF CONFORMANCE

The Contractor shall provide a Section 508 Subject Matter Expert lead for VA EHRM 508 resources to work with. The Contractor shall adhere to the VA-approved Section 508 Test and Delivery Plan and Section 508 Accessibility Roadmap delivered under TO

EHRM Software Development

0001. The Contractor shall update the Government Product Accessibility Template (GPAT) and/or Voluntary Product Accessibility Template (VPAT) delivered under TO 0001 to indicate the level of Section 508 conformance as updates are made to its products and/or services to ensure and sustain 508 compliance.

The Contractor shall work closely with VA Section 508 representatives to verify Section 508 conformance of its products and/or services.

6.2.2 ACCEPTANCE AND ACCEPTANCE TESTING

The Contractor shall provide Final Section 508 Compliance Test Results. The Section 508 Test Results shall include a GPAT/VPAT Conformance Statement validating conformance to Section 508 Refresh Success Criteria and Conformance Requirements for already-developed ICT deliverables.

The Final Section 508 Test Results shall be reviewed and approved by VA Section 508 representatives to validate conformance to Section 508 Refresh Success Criteria and Conformance Requirements for ICT deliverables.

For software development for VA interfaces/systems, the Contractor shall prepare and submit a Section 508 Conformance Validation Package with content as outlined in VA Process Asset Library, Software Development Product Build process map.

The Section 508 Conformance Validation Package shall be reviewed and approved by VA Section 508 representatives to validate conformance to Section 508 Refresh Success Criteria and Conformance Requirements for ICT deliverables.

Automated test tools, manual techniques, and checklists are used in the VA Section 508 compliance assessment.

Deliverable:

- A. Final Section 508 Compliance Test Results for ICT Deliverables
- B. Section 508 Compliance Validation Package for ICT Deliverables

6.3 SHIPMENT OF HARDWARE OR EQUIPMENT

Not applicable.

6.4 ORGANIZATIONAL CONFLICT OF INTEREST

All functions related to Acquisition Support shall be on an advisory basis only. Please be advised that since the awardee of this Task Order will provide systems engineering, technical direction, specifications, work statements, and evaluation services, some restrictions on future activities of the awardee may be required in accordance with FAR 9.5 and the clause entitled, Organizational Conflict of Interest, found in Section H of the

EHRM Software Development

EHRM basic contract. The Contractor and its employees, as appropriate, shall adhere to the corporate-level Non-Disclosure Agreement signed under TO 0001.

6.5 DELIVERABLES

The Contractor shall provide deliverables for Government review and acceptance IAW with Section B.2 of the Task Order. The Contractor shall incorporate Government feedback provided via the OEHRM Deliverables review process into Task Order deliverables as applicable. Feedback shall be incorporated in either the resubmission or next required submission of the deliverable based upon the timeframe in which it is provided by the Government. For Government feedback requiring additional discussion and/or clarification, the Contractor shall coordinate language updates with VA to resolve and finalize revisions to the affected deliverable. The Contractor shall appropriately mark and date deliverables to maintain version control using the following format: TO Number – CLIN Number Formal Deliverable Title – Deliverable Due Date IAW Section B.2– Version X.X. The Contractor shall annotate major (initial submission) and minor (resubmission) deliverable releases using a numerical system (e.g. Initial submission: TO 0001 – 0001AA Contractor Project Management Plan - August 2018 – Version 1.0; Resubmission: TO 0001 – 0001AA Contractor Project Management Plan – August 2018 – Version 1.1). Resubmitted deliverables shall maintain the original due date defined in Section B.2 of the TO. The Contractor shall provide discrete deliverables in separate email submissions. Email submissions shall include the Contract/Task Order numbers and corresponding deliverable CLIN number. The Contractor shall track updates in both major and minor deliverable releases in an agreed upon format, such that the Government can identify and review language revisions for acceptance.

For all deliverables throughout this TO, Wiki links are not acceptable. If Wiki page content is required as part of the deliverable submission, the Contractor shall reference the Wiki page as an attachment within the deliverable. The Wiki page shall be representative of the current state at the time of submission. The Contractor shall export the referenced Wiki page as a timestamped portable document format and provide the referenced attachment(s) with the deliverable submission.

EHRM Software Development

CONTRACTOR EMPLOYEE PERSONAL FINANCIAL INTEREST/PROTECTION OF SENSITIVE INFORMATION AGREEMENT

This Agreement refers to Contract/Order _____ entered into between the Department of Veterans Affairs and _____ (Contractor).

As an employee of the aforementioned Contractor, I understand that in connection with my involvement in the support of the above-referenced Contract/Order, I may receive or have access to certain "sensitive information" relating to said Contract/Order, and/or may be called upon to perform services which could have a potential impact on the financial interests of other companies, businesses or corporate entities. I hereby agree that I will not discuss or otherwise disclose (except as may be legally or contractually required) any such "sensitive information" maintained by the Department of Veterans Affairs or by others on behalf of the Department of Veterans Affairs, to any person, including personnel in my own organization, not authorized to receive such information.

"Sensitive information" includes:

- (a) Information provided to the Contractor or the Government that would be competitively useful on current or future related procurements; or
- (b) Is considered source selection information or bid and proposal information as defined in FAR 2.101, and FAR 3.104-4; or
- (c) Contains (1) information about a Contractor's pricing, rates, costs, schedule, or contract performance; or (2) the Government's analysis of that information; or
- (d) Program information relating to current or estimated budgets, schedules or other financial information relating to the program office; or
- (e) Is properly marked as source selection information or any similar markings.

Should "sensitive information" be provided to me under this Contract/Order, I agree not to discuss or disclose such information with/to any individual not authorized to receive such information. If there is any uncertainty as to whether the disclosed information comprises "sensitive information", I will request my employer to request a determination in writing from the Department of Veterans Affairs Contracting Officer as to the need to protect this information from disclosure.

I will promptly notify my employer if, during my participation in the subject Contract/Order, I am assigned any duties that could affect the interests of a company, business or corporate entity in which either I, my spouse or minor children, or any member of my immediate family/household has a personal financial interest. "Financial interest" is defined as compensation for employment in the form of wages, salaries,

EHRM Software Development

commissions, professional fees, or fees for business referrals, or any financial investments in the business in the form of direct stocks or bond ownership, or partnership interest (excluding non-directed retirement or other mutual fund investments). In the event that, at a later date, I acquire actual knowledge of such an interest or my employer becomes involved in proposing for a solicitation resulting from the work under this Contract/Order, as either an offeror, an advisor to an offeror, or as a Subcontractor to an offeror, I will promptly notify my employer. I understand this may disqualify me from any further involvement with this Contract/Order, as agreed upon between the Department of Veterans Affairs and my company.

Among the possible consequences, I understand that violation of any of the above conditions/requirements may result in my immediate disqualification or termination from working on this Contract/Order pending legal and contractual review.

I further understand and agree that all Confidential, Proprietary and/or Sensitive Information shall be retained, disseminated, released, and destroyed in accordance with the requirements of law and applicable Federal or Department of Veterans Affairs directives, regulations, instructions, policies and guidance.

This Agreement shall be interpreted under and in conformance with the laws of the United States.

I agree to the Terms of this Agreement and certify that I have read and understand the above Agreement. I further certify that the statements made herein are true and correct.

Signature and Date Company

Printed Name Phone Number

ATTACHMENT A: SOFTWARE DEVELOPMENT PROJECT BACKLOG

A1: Clinical Projects

VA Priority	Request Title
----------------	---------------

EHRM Software Development

1	HSRM - HealthShare Referral Manager
2	JHIE Patient Identity Double Check
3	JHIE Ability to turn off pre-fetch of Patient Records by partner
4	JHIE Hard Refresh to force outbound query when cached query response is insufficient
5	Self-Identified Gender
6	PCMM Web - Primary Care Management Module -- PCMM Smart App
7	Refill Request via PowerChart
8	Community Care / Portal Integration
9	Automated Provisioning Process
10	PCMM Web - Replacement
TBD	Dental User Interface

A2: Revenue Cycle Projects

Project Name	Brief Description	Project Size
Updates to Direct Booking Insurance Selection – RC 237	In order to support Direct Booking procedures through HealthLife Portal, where patients will not be equipped to make a decision on what coverage is appropriate for their appointment, we need a process to enable proper benefits selection in this workflow	Small
HSRM & Interfacility – RC 158	The integration between HSRM will be bi-directional to include status updates of the referral and also appointment information. This project supports the sending of referrals and supporting information from Millennium to VistA and VistA to Millennium	Medium
Accept Health Plan Notifications – RC 231	The ability for Rhapsody to send in health plan changes inbound into Millennium to trigger automated	Medium

EHRM Software Development

	encounter modifications to update veteran benefits as they change.	
Batch Coverage Discovery Post Back – RC 611	The ability for Experian to transmit back insurance authorization information and automatically post that information into the respective registration fields and tables	
Experian - the ability to return dental/vision secondary plans eligibility responses – RC 665	The ability for Experian to return dental/vision insurance eligibility responses	
Requesting enhanced communication functionality between 3M and RevCycle work items. VA requesting functionality to place a task on hold in 3M for RUR review, then it will also place a hold in AccessHIM and send a work item to RUR in RevCycle. – RC 534	The ability for 3M to trigger work items for Cerner AccessHIM and Cerner Patient Accounting workflows	X-Large
Pharmacy Billing – RC 576	VA requesting functionality to allow for the appropriate VHAP to be selected within an LPE based on additional logic driven by the clinical encounter associated with the pharmacy Rx if the veteran has multiple VHAP's	X-Large
First Party & AR Management – RC 408	<p>VA requesting the ability to migrate legacy A/R from VistA to EHRM via STARS. Additionally, VA is requesting the ability to migrate historical/closed A/R from VistA to EHRM via STARS.</p> <p>Need to summarize all the other RCs</p> <p>First Party AR Management:</p> <ul style="list-style-type: none"> • Apply interest and admin fees along with the ability to apply 	X-Large

EHRM Software Development

	<p>payments to these fees prior to satisfying balances.</p> <ul style="list-style-type: none"> • Use the statement print date to determine and track the aged AR. • Allow posting of lockbox payments at the account level. • Refer debt at the account level. • Use DFN as an identifier for downstream systems. 	
SC/SA Visible to Rev Cycle – RC 702	Display the Encounter and Charge Level Service Connected/Special Authority indicator within the Revenue Cycle application	Small
VBA Smart App – RC 407	Create a new application that will allow claim reviewers to access the patients longitudinal record while processing claims.	X-Large
Urgent Care Copays – RC 247	The ability to calculate co-pays for Urgent Care encounters	Small
Long Term Care Copay – RC 540	The ability to calculate co-pays for Long Term Care encounters	
VDIF Co-Pay Syncing - LTC and Inpatient co-pay Accumulators – RC 543	The ability to sync co-pay accumulators for Inpatient and Long Term Care encounters across Millennium and VistA	Small
Rates and Charges Pricing Tool – RC 635		
Ability to Flex on provider specialty/user role for GL Aliasing – RC 613	Ability to drive general ledger aliasing based on provider specialty when a clinician provides care in multiple care venues in a single day with a single login.	Medium
PCMM Web Replacement – RC 312	Enhance existing solutions to accommodate the VAs PCMM workflows which includes creation of teams, assigning roles to teams, assigning personnel to teams and assigning the teams to the patient.	X-Large
Disclosure Audit Log/Accounting of Disclosure – RC 272	Updates to the Disclosure Audit Report produced from Report Request Maintenance so the details	Small

EHRM Software Development

	for begin date/time and end date/time are included on the audit.	
JHIE Patient Identity Double Check – RC 708	Adding probabilistic patient match when external partner returns data to confirm same patient.	
JHIE Ability to turn off pre-fetch of Patient Records by partner – RC 690	Allowing an external partner to provide patient data for adhoc queries but not for batch queries.	
JHIE Hard Refresh to force outbound query when cached query response is insufficient – RC 697	Allowing an end-user to determine to override the cached patient data and query all the external partners to get the most recent data	
JHIE - Data Quality for Interop Services - RC 306	Send patient CCD documents to Diameter Health where external quality analysis will be completed regarding the quality of data within the CCD.	
Refill Request via PowerChart – RC 324		Small
Community Care / Portal Integration – RC 473	Ability to schedule community care appointments through the Cerner Consumer Portal (HealthLife) and that Cerner build the request logic currently found in DST and VAOS into Millennium.	
Automated Provisioning Process – RC 602	Development to support an automated provisioning process. In the proposed future state, VA OIT IAM will initiate the provisioning request and the Cerner system will have the capability to create/update/de-provision the users/accounts in Cerner AD, Millennium and other ancillary applications automatically. This will be done, without manual intervention and the system will send confirmation to VA provisioning system.	Large
Blind Rehab 5.0 – RC 275	New functionality includes first an interface to Blind Rehab 5.0 and then the development of Blind Rehab 5.0 into Millennium for post IOC. Specifically, integration with registration, scheduling, eye care, case management/social work, providers, nursing, rehabilitation/recreation	X-Large

EHRM Software Development

	therapy, psychology, pharmacy, prosthetics, telehealth, community care, 508 compliance, 70-80% new content, clinical workflows, and reports is needed.	
Virtual Desktop Integration for Cardiology – RC 225		
VA.Gov API: Appointment – RC 565	This project is to support the patient or patient rep to find providers that the patient has a relationship with. In addition, to allow scheduling of patients who are eligible to for tele health or community appointment.	X-Large
VA.Gov API: Medical Imaging – RC 562	Support non-dicom images.	Large
VA.Gov API: Prescription Management – RC 563	Allow veterans, care givers, or representatives to view a list of prescriptions, medications, and medical devices. Also view outpatient medications, initiate refill requests, view a list of all of the VA prescriptions filled by a VA Mail Order pharmacy and mailed in the last 45 days, view and track the status of refill requests, initiate renewal requests, submit information about compliance with prescriptions.	Large
VA.Gov API: Secure Messaging – RC 470	Functionality so veterans, care givers, or representatives can receive, view, search, select, archive, view attachments, reply, initiate, attach files, view/select a list of provider pools, patient care coordinators or other staff, for secure messages on VA.Gov. Providers should be able to flag time sensitive messages so only the originator and provider can view the message, end the message thread, flag a veteran from messaging.	Medium
VA.Gov API: Clipboard – RC 566	VA is asking for the ability to support patients submitting discrete forms electronically. This project would be able to support the reading of reference data (forms), and the ability write responses back into the chart.	X-Large

EHRM Software Development

<p>Use of Current VMBP on Lifetime Pharmacy Encounter – RC 441</p>	<p>VA has requested the development of the following requirement “As a VA user, I want the Lifetime Pharmacy Encounter (LPE) to use the current XXXXX (VMBP) rather than the VMBP applied to the prior or initial dispense so that the Veteran’s copay is calculated correctly based off their current eligibility.”</p>	<p>Large</p>
<p>Need for dosing mpage to communicate with other apps (powerchart, medmgr, carecompass) – RC 346</p>	<p>There is a need for dosing mpage to communicate with other application (powerchart, medmgr, carecompass). For pharmacy/nursing users, the system should automatically update the chemotherapy dosing mpage when the users have completed dosing double-check verification and activation from the respective tools. The pharmacy verify action in the chemo dosing mpage should automatically update to show “verified” with user name and date/time stamp when the future verification takes place in MedMgr. The nursing verification and activation action in the chemo dosing Mpage should automatically update to show ‘verified’ with user name and date/time stamp when the future verification and activation takes places in PowerChart.</p>	<p>X-Large</p>
<p>Multum: Med Supplies - As Content – RC 116</p>	<p>The VA has requested that Multum provide an increased amount of medication supply content in order to decrease the need for custom maintenance of this content within Cerner. As part of this request, Millennium will require development to consume this content as part of Multum updates and leverage the content in the prescription order entry and dispensing workflows.</p>	<p>X-Large</p>
<p>Pharmacy Claims Enhancement: Non-Pharmacist: Claims Modification Limitation – RC 361</p>	<p>VA has requested the development of the following requirement “As a non-pharmacist (e.g.. OPECC, insurance verification, etc.) who are not licensed to perform clinical activities, I want the system to restrict my ability to modify specific fields within the outpatient PharmNet so that the user can only modify claims content that they are responsible for changing to support administrative claims adjudication and ensure patient safety by not allowing access to clinical claims</p>	<p>Small</p>

EHRM Software Development

	adjudication.” Alternative Cerner Proposal: Update policy and training to describe what fields can be updated OR configuration that limits some, but not all, access to these fields (task manager)	
LaunchPoint Enhancements – RC 121	Capture of boarding time so that users can view continuous time from admission, regardless of status.	Small
Suicide High Risk Patients – RC 230	Provide the ability to adjust the copay amount for outpatient visits that has been flagged as a high-risk suicide patient.	Medium