

From: Windom, John H.
Sent: 28 Jun 2018 07:18:56 -0700
To: (b) (6); Morris, Genevieve (OS/ONC/IO); Sandoval, Camilo J.
Subject: RE: OEHRM

Sounds great. I can on you folks to massage as appropriate.

Vr
John

John H. Windom, Senior Executive Service (SES)
Program Executive for Electronic Health Record Modernization (PEO EHRM)
811 Vermont Avenue NW (b) (6)
Washington, DC 20420
(b) (6) @va.gov
Office: (b) (6)
Mobile: (b) (6)
Executive Assistant: (b) (6) - Appointments and Scheduling
(b) (6) @va.gov Office: (b) (6)

From: (b) (6)
Sent: Thursday, June 28, 2018 9:41 AM
To: Windom, John H.; Morris, Genevieve (OS/ONC/IO); Sandoval, Camilo J.
Subject: RE: OEHRM

John, we will go with something more akin to what USD Wilkie would have said in the hearing (this group of QFRs is different as it would have been actually asked in the hearing): (pretty close to what you wrote, just less detail)

As part of VA's overall due-diligence in assessing various aspects of the Electronic Health Record (EHR) Request for Proposal (RFP) and related requirements documents, the EHRM Team utilized dozens of external executives and technical/clinical subject matter experts throughout the health care industry and had them sign VA Non-Disclosure Agreements . Dr. Moskowitz was one of those experts.

Kindly, (b) (6)

(b) (6) / *Special Assistant / OCLA / Department of Veterans Affairs*
Email: (b) (6) @va.gov / Phone: (b) (6) / Mobile: (b) (6)
810 Vermont Ave / Washington, D.C , NW 20420



From: Windom, John H.
Sent: Thursday, June 28, 2018 8:34 AM
To: Morris, Genevieve (OS/ONC/IO) <(b) (6)@hhs.gov>; (b) (6)
(b) (6)@va.gov>; Sandoval, Camilo J. (b) (6)@va.gov>
Subject: RE: OEHRM

Do you want to hold or offer the entire list?
JW

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From: Morris, Genevieve (OS/ONC/IO) [mailto:(b) (6)@hhs.gov]
Sent: Thursday, June 28, 2018 8:32 AM
To: Windom, John H.; (b) (6)
Cc: Sandoval, Camilo J.
Subject: [EXTERNAL] Re: OEHRM

I'm good with the below.

On: 28 June 2018 08:28.
"Windom, John H." <(b) (6)@va.gov> wrote:

(b) (6)

Subject to review by Genevieve and Camilo, here are my thoughts. I defer to them as to whether we provide the entire list of external reviewers. However, it is attached for easy reference.

Vr

John

A) Electronic Health Record Modernization

EHR modernization—a historic, multi-billion dollar overhaul of the system used to track veterans’ health records—requires input from specialized professionals to align the VA and U.S. Department of Defense with an interoperable system. During our meeting, you mentioned that you consulted with experts and appropriate parties prior to moving forward with the VA’s contract with Cerner.

- **Who specifically did you seek input from on this contract? Did Dr. Bruce Moskowitz or any other individual outside of VA provide input on EHR modernization?**

As part of VA’s overall due-diligence in assessing various aspects of the Electronic Health Record (EHR) Request for Proposal (RFP) and related requirements documents, the EHRM Team utilized 50 external executives and technical/clinical subject matter experts throughout the health care industry. Dr. Moskowitz was one of those 50 experts and was required to sign the requisite VA Non-Disclosure Agreement as did each of the other participants.

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From: (b) (6)
Sent: Wednesday, June 27, 2018 6:59 PM

To: (b) (6); (b) (6); Hutton, James; (b) (6); (b) (6); Clancy, Carolyn;
(b) (6); (b) (6); Morris, Genevieve (OS/ONC/IO); Windom, John H.; (b) (6);
(b) (6)

Cc: O'Connor, Christopher; Anderson, Christopher; Powers, Pamela J SES OSD OUSD P-R (US)

Subject:

Leaders, please task these out ASAP. We must have them back to the Committee by COB on Friday and first to SecVA Nominee and then WH. Need them NLT COB tomorrow, sooner if possible.

A-OPIA/(b) (6)
B, C-VHA/CFM
D-OEHRM
E-HR&A
F (b) (6) OPIA

Sent with Good (www.good.com)

From: Windom, John H.
Sent: 28 Jun 2018 07:17:42 -0700
To: Morris, Genevieve (OS/ONC/IO); (b) (6)
Cc: Sandoval, Camilo J.
Subject: RE: OEHRM

OK here.
Thx
John

John H. Windom, Senior Executive Service (SES)
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From: Morris, Genevieve (OS/ONC/IO) [mailto:(b) (6)@hhs.gov]
Sent: Thursday, June 28, 2018 9:11 AM
To: (b) (6) Windom, John H.
Cc: Sandoval, Camilo J.
Subject: [EXTERNAL] RE: OEHRM

That's fine. There's no need to give a specific number really.

Genevieve Morris
Detailed to the Veterans Affairs Office of the Secretary
Principal Deputy National Coordinator
Office of the National Coordinator for Health IT
U.S. Department of Health and Human Services

(b) (6)

(b) (6)

www.healthit.gov | [Health IT Buzz Blog](#) | [@ONC HealthIT](#)



From: (b) (6)@va.gov>
Sent: Thursday, June 28, 2018 9:10 AM
To: Morris, Genevieve (OS/ONC/IO) <(b) (6)@hhs.gov>; Windom, John H.

(b) (6) @va.gov>
Cc: Sandoval, Camilo J. (b) (6) @va.gov>
Subject: RE: OEHRM

Can we say:

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Sent: Thursday, June 28, 2018 8:32 AM
To: Windom, John H. <(b) (6) @va.gov>; Haverstock, Cathleen <(b) (6) @va.gov>
Cc: Sandoval, Camilo J. <(b) (6) @va.gov>
Subject: [EXTERNAL] Re: OEHRM

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On: 28 June 2018 08:28,
"Windom, John H." <(b) (6) @va.gov> wrote:

(b) (6)

Subject to review by Genevieve and Camilo, here are my thoughts. I defer to them as to whether we provide the entire list of external reviewers. However, it is attached for easy reference.

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John

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Cc: (b) (6); (b) (6) Powers, Pamela J SES OSD OUSD P-R (US)
Subject:

Leaders, please task these out ASAP. We must have them back to the Committee by COB on Friday and first to SecVA Nominee and then WH. Need them NLT COB tomorrow, sooner if possible.

A-OPIA (b) (6)
B, C-VHA/CFM
D-OEHRM
E-HR&A
F (b) (6) OPIA

Sent with Good (www.good.com)

From: Truex, Matthew
Sent: 25 Jun 2018 11:58:34 -0500
To: (b) (6)
Cc: (b) (6); (b) (6); Foster, Michele (SES); Windom, John H.; (b) (6); (b) (6); (b) (6)
Subject: RE: FOR ACTION: FOIA Request 18-08443-F - Due June 27, 2018
Attachments: FOIA Copy of EHRM RFP External Review - Printable - v8.xlsx, RE: MITRE FOIA Requests

Ms. Farer,

Attached is the spreadsheet/review matrix that is being requested through FOIA. (b) (5)

(b) (5)

(b) (5) It is my assumption, a similar determination will be made relative to this request.

Responses to 'Search Questions':

Search Questions:

1. Please identify all paper-based and electronic records systems searched for records responsive to this request. Document housed on local/shared computer drive(s), as well as in electronic Contract Management System (eCMS) (VA's Contracting writing system)
2. Identify all search terms utilized to search the systems noted above. N/A
3. Please identify any other program offices that, based on your expertise, you believe may have responsive materials and provide the basis for such determination. N/A

Please let me know should you have any questions.

Regards,
Matt

Matthew Truex
Contracting Officer
Department of Veterans Affairs
Office of Procurement, Acquisition and Logistics
Technology Acquisition Center
23 Christopher Way
Eatontown, New Jersey 07724
Office: (b) (6)
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e-mail: (b) (6)@va.gov



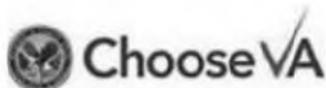
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From: Foster, Michele (SES)
Sent: Wednesday, June 20, 2018 8:54 AM
To: Windom, John H.; (b) (6)
Cc: Truex, Matthew; (b) (6) (b) (6)
Subject: RE: FOR ACTION: FOIA Request 18-08443-F - Due June 27, 2018

(b) (6)

We'll look through our files and get back to you soonest.
R/Michele

Michele R. Foster
Associate Executive Director
Technology Acquisition Center (TAC)
Department of Veterans Affairs
23 Christopher Way
Eatontown, NJ 07724
Ofc: (b) (6)



VA Core Values: Integrity Commitment Advocacy Respect Excellence

VA Core Characteristics: Trustworthy | Accessible | Quality | Innovative | Agile | Integrated

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From: Windom, John H.
Sent: Tuesday, June 19, 2018 6:24 PM
To: (b) (6)
Cc: Foster, Michele (SES); Truex, Matthew; (b) (6) (b) (6)
Subject: RE: FOR ACTION: FOIA Request 18-08443-F - Due June 27, 2018

(b) (6)

I believe this request should be forwarded to the TAC. The TAC team managed this process On our behalf. I have copied Michele Foster who oversees TAC operations.

Vr
John

Sent with Good (www.good.com)

From: (b) (6)
Sent: Tuesday, June 19, 2018 1:00:19 PM
To: Windom, John H.
Cc: (b) (6)
Subject: FOR ACTION: FOIA Request 18-08443-F - Due June 27, 2018

Good Afternoon,

The VHA FOIA Office received the attached request from Isaac Arnsdorf from ProPublica. Mr. Arnsdorf is requesting "copies of a spreadsheet prepared by John Windom's staff since Feb. 1, 2018, showing all the comments made on a conference call with David Shulkin, Scott Blackburn, Marc Sherman and Bruce Moskowitz. The spreadsheet showed how the comments had been addressed and what actions needed to be taken"

Please advise if your office would have records responsive to this request or if we need to get clarification from this requester. Please feel free to add others to this message that you believe may assist with this request. If your office does not maintain records responsive to this request, please indicate such in your response.

I have assigned this action a due date of **June 27, 2018**. Please advise if you anticipate you will require additional time.

The VHA FOIA Office requires the below Search questions to be addressed on this FOIA request.

Search Questions:

1. Please identify all paper-based and electronic records systems searched for records responsive to this request.
2. Identify all search terms utilized to search the systems noted above.
3. Please identify any other program offices that, based on your expertise, you believe may have responsive materials and provide the basis for such determination.

If you have any questions, please feel free to contact me at (b) (6)

(b) (6) RHIA, CHPS, CIPP/G, CHPS
VHA FOIA Officer (10A7)
Information Access & Privacy Office/Health Information Governance
Office of Health Informatics
810 Vermont Avenue, N.W., Washington, D.C. 20420
Office (b) (6)

EHRM External RFP Review Matrix

| Item # | Comment | Response | Modifications to RFP |
|--------|--|---|-----------------------------------|
| R#1-1 | <p>In this contract (and I may have missed it), I could find no clear definition of expectations regarding Cerner's ability to "interoperate" with other EMR vendors (Epic, Meditech, Eclipsys, Allscripts, etc.). Though there is reference to interoperability, my suspicion is that it is defined as "the passing of certain clinical data elements" or "the exchange of certain relevant clinical data elements" between disparate EMR vendors. This may be defined as data exchange or interface, but it is not the true, seamless interoperability or integration that was suggested in conversations I have participated in with VA stakeholders.</p> | <p>IDIQ PWS Section 5.10.4: Seamless Interoperability / Joint Industry Outreach includes significant detail on the topic. The interoperability section is copied below this table for reference.</p> <p>IDIQ PWS section 5.5.4 Data Exchange - Application Program Interface (API) Gateway also includes detail on the creation of strategic open APIs.</p> <p>VA NF-177: Interoperability - Data Standards: The system shall support the use of the health data standards identified in the VA DoD Health Information Technical Standards Profile and by the VA DoD Interagency Clinical Informatics board, including following common data standards: National Information Exchange Model NIEM; Health Level 7 HL7; Logical Observation Identifiers, Names and Codes LOINC; Systematized Nomenclature of Medicine SNOMED; RxNorm, MedRT, ICD, CPT, HCPCS, Veteran Information Model VIM; and Healthcare Information Technology Standards Panel HITSP as well as VA/DOD/IPO extensions to these standards.</p> <p>VA-NF-T23: Informatics - Care Integration: VA must be able to seamlessly integrate with HIE and external-to-EHR shared services to provide for a seamless experience and to more effectively integrate in community care efforts, as well as with other parts of VA (e.g., identity management). This includes but is not limited to the EHR product ability to support external shared services (SOA services, such as identity management, care plan service, scheduling, etc.) accessed via standards-based APIs. (Process Continuity, Evolution, Extension) KSR5 [NOW +]</p> <p>VA NF-Z11: Health Information Exchange: The system shall support VA electronic exchange of health records via other interoperable networks (e.g. CareQuality, CommonWell Health Alliance, DirectTrust, National Association for Trusted Exchange) by supporting their specifications, security and content specifications</p> | <p>No change required.</p> |
| R#1-2 | <p>I bring this issue to the fore only because my conversations have led me to believe that the VA was pursuing a contractual obligation for "true interoperability" with this Cerner contract. Any such interest would require contractual terms and a clause developed, agreed to, and executed by Cerner as well as the other primary EMR vendors (Epic, Eclipsys, Meditech, Allscripts, and others). Failing such a contractual obligation, the Cerner contract represents an exceptional current-state software agreement, but no significant progress or advancement toward true EMR interoperability.</p> | <p>See response to R#1-1.</p> <p>Also, the RFP represents a contractual agreement with Cerner. Cerner has agreed to open APIs, VA data rights, and adherence to data standards to support interoperability. Outside of the Cerner contract, VA is actively pursuing partnerships with other health system providers to meet Cerner's commitment to data sharing.</p> | <p>No change required.</p> |

EHRM External RFP Review Matrix

| | | | |
|-------|---|---|----------------------------|
| R#1-3 | I could not find specific reference to existing data and the migration of existing data from the current VistA databases to the Cerner database. Is this multiple data migrations? From how many existing databases to how many instances of the Cerner database? | <p>IDIQ PWS section 5.1.8: Data Migration Planning: - details on data migration planning including: The Contractor shall support data migration planning to support seamless care and to ensure operational integrity.</p> <p>The Contractor shall:</p> <p>a) Develop a Data Migration Plan (DMP) that provides an understanding of the EHRM Solution implementation sequence and priorities, data quality, data volumes, and data extract, transformation and load strategy for both the EHRM and Population Health Management solutions.</p> <p>IDIQ PWS 5.9: 5.9 Analysis And Migration Of Legacy Data</p> <p>The Contractor shall execute the following data migrations in alignment with the EHRM wave deployment schedule. Data migrations include:</p> <p>a) VA clinical data migrated to HealtheIntent – initially 15 domains</p> <p>b) Non-DICOM Images</p> <p>c) DICOM images</p> <p>i. Reference</p> <p>ii. Diagnostic quality</p> <p>Additional migrations shall occur following the overall EHRM schedule:</p> <p>a) Bulk VA data from HealtheIntent to Millennium – initially 5 domains</p> <p>i. Initially PAMPI: Problems, Allergies, Medications, Procedures, Immunization</p> <p>ii. Moving to PAMPI+</p> <p>iii. DICOM imaging and imaged documents and other multi-media will not be included in the initial phases of migration.</p> <p>b) Iterative migration of remaining VistA clinical, dental, administrative and financial data that is relevant for clinical care, registries, reporting, or analytics to additional domains in HealtheIntent and/or Millennium. Priorities will be determined by the Data Governance Board.</p> <p>c) Migration or archiving of remaining VistA data per direction of the Data Governance Board to enable retirement of VistA instances.</p> <p>The Contractor shall develop the data processing scripts including terminology mapping to standards and information model transformation.</p> <p>The Contractor shall migrate VistA legacy data into HealtheIntent utilizing a historical bulk load and an ongoing update stream during the deployment time period based upon the following process:</p> | <i>No change required.</i> |
| R#1-4 | VistA and (ancillary systems displacements) should have a data migration schedule with data integrity assurances. | The details of data migration scheduling for VA enterprise data, VA IOC deployment data and imaging will be included in the data migration task order and Cerner proposal in response to that task order. | <i>No change required.</i> |
| R#1-5 | I could not find specific reference to EMPI and identity management. I would be concerned about duplicate records, record resolution. The expectation should be defined with a timeline and acceptable error rate. What is the process and accountability for duplicate resolution? | <p>IDIQ PWS Section 5.5.2: Identity and Access Management includes significant detail.</p> <p>VA NF-15: The system shall be able to synchronize all patient identities to the enterprise Identity Management System (i.e., DEERS, MVI)</p> <p>VA - NF 24: When communications allow, the system shall enforce a search to the enterprise Identity Management System (i.e., DEERS, MVI) prior to adding a new patient VA-NF52: The system shall support the matching of External Patient IDs coming in through eHealth Exchange/CommonWell and other community partner systems.</p> | <i>No change required.</i> |
| R#1-6 | Is there a specific listing of ancillary systems that will be displaced by the Cerner EMR? If so, I did not see that listing. | Yes, VA has compiled a mapping of Cerner to VistA modules to identify what VistA components will or will not be replaced by Cerner modules. That list is used internally by VA to determine next steps for remaining VistA components. As these components will not be replaced or managed by Cerner, they are no listed as part of the Cerner RFP. The Cerner solution replaces all clinical modules of VistA and does away for the need of many non-clinical modules. | <i>No change required</i> |
| R#1-7 | Is there a specific listing of ancillary systems that will be retained post Cerner EMR implementation? | Yes. VA is maintaining a list of ancillary systems that will be retained. As these systems will not be managed by Cerner, they are not listed as part of the Cerner RFP. | <i>No change required.</i> |
| R#1-8 | I did not see a specific reference to system performance commitments. Such a reference should include defined response times (user defined performance, not machine defined performance), uptime commitments and resolution accountabilities. These should be defined by the VA, not by Cerner. | VA NF-86: User Operational Availability - System availability exclusive of planned downtime shall be 99.9% for the Tier I production systems as defined in the Hosting Scope document. System availability exclusive of planned downtime shall be 99.9% for the HA-CAS production systems as defined in the Hosting Scope document. HealtheIntent components required for data migration and continuity of care shall have the same SLA and penalties as Tier I production systems as defined in the Hosting Scope document. | <i>No change required.</i> |

EHRM External RFP Review Matrix

| | | | |
|--------|---|--|-----------------------------------|
| R#1-9 | <p>Contractually, I would strongly recommend all system performance be the responsibility of Cerner. In other words, all ancillary systems and interfaces, data exchanges should be assigned to Cerner for performance accountability. In my experience, an EMR vendor often places accountability on a sub-system or ancillary system for poor performance. It is best to have one vendor responsible for assuring everything works together as expected. This is often accomplished by ancillary systems sub-contracting through the prime vendor (Cerner).</p> | <p>Cerner is responsible for all performance for the new EHR and ancillary systems they are providing, as well as the interface design and implementation. See SLA responses to R#1-12&13.</p> <p>IDIQ 5.5.3 EHRM and VA System Integration The Contractor shall identify common VistA interfaces required for all EHRM deployment sites with input from VA. This shall include currently deployed interfaces identified in Section D, Attachment 004 as well as those which VA develops or procures during the performance of this contract. The Contractor shall support all development, documentation including interface control documents, compliance reviews and test activities required by VA to integrate these internal and external systems as required. Integration activities may include, but are not limited to:</p> <ul style="list-style-type: none"> a) Existing VistA integrations to external or internal support systems b) Community Care Clinics – including medical documentation required for provider payment if provided in electronic format. c) Medical Devices – Internal and External d) Mobile Apps / Mobile Devices – Internal and External e) CMOPs <p>The Contractor shall modify VA legacy systems as required to support integration with EHRM provided that VA will collaborate with the Contractor to share knowledge of the VA legacy systems to support the integration with EHRM. In addition, the Contractor shall provide technical expertise to VA and its Contractors to support integration with EHRM of Commercial software as required. Note that site-specific system interface and legacy system modification may be required as site requirements are identified during deployment. VA will provide access to VA’s enterprise InterSystems HealthShare licenses for development of EHRM/VistA interfaces.</p> <p>The Contractor shall provide interface testing. Tests include steps for nominal and off-nominal interface conditions, minimum and maximum data content, and error handling as outlined in the respective ICD. Data will be verified on each end of the interface to confirm that the correct data is transmitted from EHRM and the data received by EHRM is stored and displayed correctly. Data verification will be automated wherever possible. Finally, [the Contractor shall] provide VA the ability to audit all interface traffic that occurs during testing. For any new code or code modifications to VA systems by the Contractor, the Contractor shall provide the software build/package including source code and required documentation for release within VA and use the VA approved tool/software code repository which is the Rational tool suite. The Contractor shall change to the new VA code repository if VA transitions from Rational to an internal VA GitHub repository. For such modifications to VA legacy systems, the Contractor shall create, maintain, and provide the architecture/system diagrams with input from VA for the EHRM and VA systems integration using the DOD Architecture Framework (DoDAF).</p> | <p><i>No change required</i></p> |
| R#1-10 | <p>I have many questions about medical imaging. Cerner is not known to have the best imaging solutions. Given the VA patient population, this area should be reviewed with a particular interest to protect VA interest. I would include specific performance clauses related to image capture, storage, retrieval, resolution and exchange for both medical and diagnostic imaging.</p> | <p>VA has not included the Cerner PACS module in this acquisition due to similar concerns. Also see response to R#1-17.</p> | <p><i>No change required.</i></p> |
| R#1-11 | <p>I did not see specific reference to Population Health Management tools or predictive analytical modules to support specific patient populations (i.e.; chronic disease such as diabetes).</p> | <p>IDIQ PWS Section 5.8: BUSINESS INTELLIGENCE, DATA ANALYTICS, AND POINT OF CARE DECISION SUPPORT. This section covers a lot of related topics including: g) Provide the ability to provision and maintain data marts around specific clinical or administrative subject areas and utilize provided reporting and analytic tools to report and analyze the data</p> | <p><i>No change required.</i></p> |
| R#1-12 | <p>Some contingency should be made for hardware performance measurement (processing and response times) with regard to assigned accountability. If the system is underperforming, who is accountable to remediate? How quickly?</p> | <p>Cerner is providing a managed hosting service and their LightsOn Monitoring to VA.</p> <p>NOTE: There is a separate Cerner Hosting Scope of Work document that is not a part of the RFP but will be incorporated in the final contract language. Specific hardware performance and remediation procedures are described in that document including the provision of near-real time views into system capacity, performance, and user device latency on both a snapshot and trend view. System availability, performance and functional capability issues are handled as an incident with resolution time frames specified by the criticality of each incident. Detailed metrics will be included in task orders describing hosting and help desk requirements.</p> | <p><i>No change required.</i></p> |

EHRM External RFP Review Matrix

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| R#1-13 | I did not see and could not find specific mention of service level agreements regarding response times. | <p>VA and DoD will be sharing an instance of the commercial Cerner product based in the Cerner data center conforming to Cerner commercial service level agreements. Note that specific service level agreements will be determined for each task order.</p> <p>IDIQ PWS section 5.3.3 System Quality and Performance Measures and Monitoring</p> <p>The Contractor shall provide its commercial performance measurement system for system acceptance for discussion and review with VA. The Contractor shall conduct analysis and design activities for system quality and performance. The Contractor shall provide performance and availability trend analysis and supporting data in the Monthly Progress Report to show prediction, trending, and monitoring of system's performance trends. The Contractor is responsible for reporting all issues or errors associated with the EHR solution, and acknowledges and agrees that software errors creating patient safety risks shall not be considered confidential, proprietary or trade secrets, and accordingly, shall be releasable to VA or its agents. The VA retains the right to share any issue, error or resolution approach related to software errors creating patient safety risks.</p> <p>Quality Assurance Surveillance Plan Appendix A-1: EHRM Functional Key Performance Indicators includes over 120 areas of clinical measurement along with specific detail on VA priorities and Cerner Lights On measurement capabilities. These metrics will be included as appropriate in each task order with VA surveillance on Cerner performance against these metrics.</p> <p>Quality Assurance Surveillance Plan Appendix A-2: EHRM Non-Functional Key Performance Indicators includes 20 areas of technical measurement along with critical success factors and suggested numerical measures. These metrics will be included as appropriate in each task order with VA surveillance on Cerner performance against these metrics.</p> | <i>No change required.</i> |
| R#1-14 | I did not see and could not find specific mention of service level agreements regarding disaster recovery, backup, contingency or business/service continuity. | <p>IDIQ PWS section 5.3.2 Continuity of Operations (COOP), Disaster Recovery (DR), and Business Continuity Planning Services.</p> <p>IDIQ PWS section 5.3 Hosting requires: c) Provide a primary and alternate data center to support continuity of operations and disaster recovery requirements.</p> <p>VA -FR-19: Manage Clinical Documentation: Includes the ability to create, modify, authenticate and ensure continuity of record with fail over and disaster recovery. NOTE: There is a separate Cerner Hosting Scope of Work document that is not a part of the RFP but will be incorporated in the final contract language. Specific service level agreements related to disaster recovery, backup, contingency and business/service continuity have been negotiated with Cerner to ensure VA requirements are met.</p> | <i>No change required.</i> |
| R#1-15 | I did not see sufficient detail related to the incorporation of emerging technologies such as self-service, remote monitoring and telehealth solutions. I would include artificial intelligence (AI) as a clause as well. | <p>VA-FR-23 Manage Remote Care: Provides the ability to interact with patients and providers, provide care, treatment, and education to the patient population unable to physically present at a VA medical facility. Includes the ability to support coordinated, bi-directional patient /provider and provider/provider communications electronically in a secure manner. Includes connected care modalities of telehealth, remote home monitoring, point of service kiosks, mobile applications/tools.</p> <p>Includes the ability to customize the patient portal and associated mobile applications with VA-specific content, branding and transactional services such as healthcare enrollment application, Veteran profile update, claim status and other VA services.</p> <p>VA-FR-23: Remote access: Provides the ability to interact with patients and providers, provide care, treatment, and education to the patient population unable to physically present at a VA medical facility. Includes the ability to support coordinated, bi-directional patient /provider and provider/provider communications electronically in a secure manner. Includes connected care modalities of telehealth, remote home monitoring, point of service kiosks, & mobile applications/tools.</p> <p>IDIQ PWS Section 5.10.2: Innovation Categories: includes significant detail covering future-facing development. Specifically:</p> <p>d) An extension of the EHRM using either Contractor-dependent or independent technology. An example of an extension includes a new application such as a growth chart application or medication adherence application. An independent application may use Fast Healthcare Interoperability Resources (FHIR) and a SMART container to visualize the application in the EHRM. An example of a Contractor-dependent innovation is a similar application that leverages Contractor proprietary objects-oriented technologies and APIs to connect the application to the EHRM. The Task Order will describe the specific requirements of Contractor to sustain the extension. An extension will typically be owned by Contractor and licensed to the VA with unlimited rights and subsequently made available under an open source license such as APACHE, Version 2.</p> <p>e) An open innovation is a foundational, platform independent technology that may be utilized with Contractor solutions but has independent value outside of Contractor's platforms. Examples include Cerner terminologies, ontologies, methods of developing healthcare IT content, standards processes and rules, for example, such as those employed to program Cerner's population health solutions. Open innovation Intellectual Property (IP) will be committed to an open source community or public domain, as appropriate and mutually agreed to in a Task Order, by Contractor and the VA when such open innovation IP is necessary to realize a standardized implementation of platform-independent healthcare IT content.</p> <p>f) A joint contribution is an innovation created and developed by Contractor and the VA. If the VA is not contributing funds, then a CRADA may be negotiated to facilitate the Joint Contribution in coordination with the VA Technology Transfer Program (TTP). The VA may receive consideration in the form of software allowances, future licensing discounts, or other remuneration, according to parameters and amounts previously agreed by the Innovations Governance Board as documented in a written agreement subsequently incorporated into this contract or one of its Task orders, and joint inventors of patented inventions may receive royalties in these arrangements in accordance with patent license agreements to be</p> | <i>No change required.</i> |

EHRM External RFP Review Matrix

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| R#1-16 | Ideally, the Cerner instance should be “cloud first, mobile always.” Is this the technical configuration? Has that been defined in the contract? Is there an upgrade or migration path in the contract? | <p>VA will be sharing a hosting with DoD which is currently hosted in the Cerner data center. Mobile and eventual cloud migration are both addressed in the IDIQ PWS.</p> <p>IDIQ PWS 5.2.1.1: Software Requirements j): The EHRM solution shall support broad access via tablet or mobile devices and pursue technology to reduce the burden to the clinicians (e.g., providing third-party provider access to information using light-weight portals and support for future generation mobile devices). Platform specifics shall be adjudicated by joint governance and incorporated by VA at a TO level.</p> <p>IDIQ PWS 5.3 EHRM HOSTING AND MANAGED SERVICES The Contractor shall provide enterprise datacenter hosting and services consistent with the hosting requirements set forth in Contractor’s Hosting Agreement. If a cloud hosting environment becomes a more viable solution over the Period of Performance, Cerner may migrate the joint DoD/VA hosting environment to a Cerner private cloud or external third party cloud upon concurrence and security validation from the joint DoD/VA governance authority.</p> | <i>No change required.</i> |
| R#1-17 | A Vendor Neutral Archive (VNA) should be defined for all image types (DICOM/NON-DICOM) as well as all other media content (digital images, video, 3D images, waveforms, etc. | <p>PWS IDIQ 5.3.6.1: 5.3.6.1 Image Hosting To support the transition to the EHRM Vendor Neutral Archive (VNA) for imaging, the Contractor shall migrate all DICOM and non-DICOM images from each VISN or site into the EHRM VNA at the time of deployment to each VISN or site.</p> | <i>No change required.</i> |
| <p>5.10.4 Seamless Interoperability / Joint Industry Outreach The Contractor is required to collaborate with VA affiliates, community partners, EHR providers, healthcare providers, and vendors to advance seamless care throughout the health care provider market. Seamless care will require the creation of an integrated inpatient and outpatient solution with software components that have been designed, integrated, maintained, and deployed with a design architecture that allows for access to and sharing of common data and an enabling security framework that supports end-to-end healthcare related clinical and business operations. Seamless care is the experience patients and providers have moving from task to task and encounter to encounter within or between organizations such that high-quality decisions form easily and complete care plans execute smoothly. Information systems support the seamless-care experience by gathering data, interpreting data, presenting information, and managing tasks. Currently, industry lacks specific and uniform interoperability standards to support seamless care between organizations that employ different EHR systems. The Requirements Traceability Matrix Section D, Attachment 003, sets forth specific Informatics and Interoperability contract requirements. To accomplish this, the Contractor shall provide software and services to enable seamless care between VA encounters, encounters with other Government healthcare institutions, and outside entities through advancements in all areas of the EHR that occur. In addition, the software and services shall support the VA designated standards, such as SMART on FHIR and SMART-enabled applications, or other published standards.</p> <p>The objective of these interoperability solutions is to advance the state of the art supporting seamless care for Veterans. Existing organizations promoting interoperability among EHR vendors, such as The Argonaut Project, have developed or are planning to develop technology standards or technical approaches that may support the EHRM seamless care strategy. To the extent that underlying third party technology is available or made available to meet the following timelines, the following interoperability software solutions and services shall be delivered under this section:</p> <p>a) By Initial Operating Capability (IOC), the Contractor shall provide a software solution enabling VA, DoD and community providers who have connected to the EHRM to share interactive care plans (ICPs) for Veterans. ICPs will enable collaborative communication between providers, and between providers and Veterans, in managing Veteran care.</p> <p>b) Within 24 months of applicable task order award, the Contractor shall provide a software solution enabling VA, DoD and connected community providers to complete referral management activities for Veterans.</p> <p>c) By IOC, the Contractor shall provide a software solution enabling VA to release and consume, via on-demand access, a Veteran’s complete longitudinal health record to and from DoD and connected community partners, irrespective of which EHR they use, provided such EHR technology is certified by the Health and Human Services Office of the National Coordinator (ONC) or its successor. The longitudinal record solution shall support Provider-to-Provider record sharing, as well as Provider-Veteran-Provider sharing (Veteran mediated record sharing), including appropriate consent management. The bi-directional health information exchange shall maximize use of discrete data that supports context-driven clinical decisions and informatics.</p> <p>d) Within 24 months of applicable task order award, the Contractor shall provide a software solution enabling connected VA, DoD and community providers connected to the EHRM to send and receive Admission/Discharge/Transfer notifications “pushed” from the provider initiating a Veteran care event to enable proactive engagement by VA care coordinators when notified of a Veteran care event.</p> <p>e) Within 24 months of applicable task order award, the Contractor will demonstrate a solution for identification and management of Veterans at high risk of suicide in</p> | | | |
| <p>5.10.4.1 Data Design and Information Sharing In support of the interoperability objectives under this Section, agreed upon Contractor proprietary information/data model extension points (e.g., ingestion and record APIs) may be provided to both international and national standards designating organizations as described and set forth in an applicable Task Order. The Contractor shall provide VA access and usage rights into any underlying proprietary terminology/code systems for the purpose of enhancing national standards to address any gaps identified in the EHRM solution. The Contractor shall also make the interoperability capabilities and product enhancements developed under this contract available to non-VA Cerner clients.</p> | | | |
| <p>5.10.4.2 VA Digital Health Platform/Digital Veterans Platform Integration VA anticipates developing a Digital Health Platform/Digital Veterans Platform (DVP) to consolidate critical VA EHR and non-EHR operational systems. The Contractor shall integrate the EHRM to interoperate with DVP, or future state VA platform, including the DVP API gateway or any other method designated by VA.</p> | | | |

EHRM External RFP Review Matrix

| Item # | Comment | Response | Modifications to RFP |
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| R#2-1 | <p>Enterprise Imaging</p> <ul style="list-style-type: none"> • It's important to protect the VA's clinical, IT and operational needs around imaging. Cerner's imaging suite is not the best in class, and there are several key components that need to be called out, to make sure that if the current stack does not meet clinical, operational or IT requirements, the VA is protected. • As an example, if in user testing and clinical validation, it is found that the solutions offered are sub-par, then perhaps there should be an option to bring in the best in class solution/s contracted through Cerner. • Current and future functionality for enterprise imaging should be broken down into these core components: <ul style="list-style-type: none"> o Capture o Storage o Viewing o Interoperability/Image Exchange o Analytics • Furthermore, imaging should sufficiently address needs across: <ul style="list-style-type: none"> o radiology o cardiology o pathology o others: wound care, dermatology, ophthalmology, endoscopy, point of care ultrasound. • I had helped pull together a brief white paper that outlines key enterprise imaging measurement, functionality and 'keys to success' working with several other key imaging informatics experts and KLAS Research. I have attached this document here for your | <p>VA-FR-14: Provide Radiology and Nuclear Medicine Services: VA is not purchasing the Cerner PACS module due to concerns similar to those expressed by other reviewers. VA is requiring Cerner to provide imaging storage in a Vendor Neutral Archive. Therefore, these issues are addressed through reliance on the existing VA imaging capabilities.</p> | <p>No change required.</p> |
| R#2-2 | <ul style="list-style-type: none"> • Additional comments <ul style="list-style-type: none"> o For storage, it will be important to make sure that the Vendor Neutral Archive (VNA) is defined for both DICOM and non-DICOM image types (these seem to be mentioned already), as well as other multimedia content, such as movies, waveforms, and "omics" data (e.g. genomics, proteomics etc.). o A desirable feature is to have the VNA grow into an enterprise clinical content management system, that has three basic layers: <ul style="list-style-type: none"> ☑ a storage layer that is standards based and cloud deployable ☑ an intelligent middle-ware layer atop of the storage layer that has the core meta-data components enabling full interoperability (PIX, PDQ, IHE) ☑ a workflow layer atop the middle-ware layer that allows for an ecosystem of various viewers and applications o The objective would then be a "capture once, store once, access infinite times" with defined SLAs and performance metrics o Also, please make sure that there is mention of a functional "zero-foot print viewing" (ZFP) capabilities. o I also did not see direct mention of image post processing tools and functionalities (e.g. 3D imaging, computer added detection/CAD, etc.) | <p>PWS IDIQ 5.3.6.1: 5.3.6.1 Image Hosting</p> <p>To support the transition to the EHRM Vendor Neutral Archive (VNA) for imaging, the Contractor shall migrate all DICOM and non-DICOM images from each VISN or site into the EHRM VNA at the time of deployment to each VISN or site.</p> <p>Cerner response to follow-up on VNA architecture: <i>Cerner's Archive for MultiMedia is a single, enterprise-wide archive that aligns with Millennium. This is a single instance that is considered a part of the EHR architecture, (e.g. every Cerner Millennium client has a CAMM archive). Cerner also includes on-site iCache services that store the most recent or needed multimedia to ensure workflow performance is optimized.</i></p> <p>Cerner also provided an architecture description of the VNA which was reviewed by the VA architecture team and determined to be sufficient to address other reviewer's comments.</p> <p>Zero Footprint Viewing: Discussions with CMO imaging representatives clarified that zero footprint viewing if VA imaging and VA monitor display capabilities and therefore not a part of the Cerner contract.</p> <p>Image post-processing tools and functionalities: Discussions with CMO imaging representatives clarified that image post processing is not within scope of the Cerner contract since VA is not purchasing the Cerner PACS module.</p> | <p>No change required.</p> |

EHRM External RFP Review Matrix

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| R#2-3 | <ul style="list-style-type: none"> It will be important to make sure that there is robust data integration and performance across all sites | <p>IDIQ PWS section 5.1.8 - details on data migration planning including: The Contractor shall support data migration planning to support seamless care and to ensure operational integrity.</p> <p>The Contractor shall:</p> <p>a) Develop a Data Migration Plan (DMP) that provides an understanding of the EHRM Solution implementation sequence and priorities, data quality, data volumes, and data extract, transformation and load strategy for both the EHRM and Population Health Management solutions.</p> <p>IDIQ PWS 5.9: 5.9 Analysis And Migration Of Legacy Data</p> <p>The Contractor shall execute the following data migrations in alignment with the EHRM wave deployment schedule. Data migrations include:</p> <p>a) VA clinical data migrated to HealthIntent – initially 15 domains</p> <p>b) Non-DICOM Images</p> <p>c) DICOM images</p> <p>i. Reference</p> <p>ii. Diagnostic quality</p> <p>Additional migrations shall occur following the overall EHRM schedule:</p> <p>a) Bulk VA data from HealthIntent to Millennium – initially 5 domains</p> <p>i. Initially PAMPI: Problems, Allergies, Medications, Procedures, Immunization</p> <p>ii. Moving to PAMPI+</p> <p>iii. DICOM imaging and imaged documents and other multi-media will not be included in the initial phases of migration.</p> <p>b) Iterative migration of remaining VistA clinical, dental, administrative and financial data that is relevant for clinical care, registries, reporting, or analytics to additional domains in HealthIntent and/or Millennium. Priorities will be determined by the Data Governance Board.</p> <p>c) Migration or archiving of remaining VistA data per direction of the Data Governance Board to enable retirement of VistA instances.</p> <p>The Contractor shall develop the data processing scripts including terminology mapping to standards and information model transformation.</p> <p>The Contractor shall migrate VistA legacy data into HealthIntent utilizing a historical bulk load and an ongoing update stream during the deployment time period based upon the following process:</p> | No change required. |
| R#2-4 | <ul style="list-style-type: none"> Are there specific clauses for SLAs around performance | <p>VA and DoD will be sharing an instance of the commercial Cerner product based in the Cerner data center conforming to Cerner commercial service level agreements. Note that specific SLAs will be determined for each task order.</p> <p>IDIQ PWS Section 5.3.3 System Quality and Performance Measures and Monitoring</p> <p>The Contractor shall provide its commercial performance measurement system for system acceptance for discussion and review with VA. The Contractor shall conduct analysis and design activities for system quality and performance. The Contractor shall provide performance and availability trend analysis and supporting data in the Monthly Progress Report to show prediction, trending, and monitoring of system’s performance trends. The Contractor is responsible for reporting all issues or errors associated with the EHR solution, and acknowledges and agrees that software errors creating patient safety risks shall not be considered confidential, proprietary or trade secrets, and accordingly, shall be releasable to VA or its agents. The VA retains the right to share any issue, error or resolution approach related to software errors creating patient safety risks.</p> <p>Quality Assurance Surveillance Plan Appendix A-1: EHRM Functional Key Performance Indicators includes over 120 areas of clinical measurement along with specific detail on VA priorities and Cerner Lights On measurement capabilities. These metrics will be included as appropriate in each task order with VA surveillance on Cerner performance against these metrics.</p> <p>Quality Assurance Surveillance Plan Appendix A-2: EHRM Non-Functional Key Performance Indicators includes 20 areas of technical measurement along with specific detail on critical success factors and suggested numerical measures. These metrics will be included as appropriate in each task order with VA surveillance on Cerner performance against these metrics.</p> | No change required. |
| R#2-5 | <ul style="list-style-type: none"> Backup and disaster recovery clauses? | <p>IDIQ PWS section 5.3.2 Continuity of Operations (COOP), Disaster Recovery (DR), and Business Continuity Planning Services.</p> <p>IDIQ PWS section 5.3 Hosting requires: c) Provide a primary and alternate data center to support continuity of operations and disaster recovery requirements.</p> <p>VA -FR-19: Includes the ability to create, modify, authenticate and ensure continuity of record with fail over and disaster recovery.</p> <p>NOTE: There is a separate Cerner Hosting Scope of Work document that is not a part of the RFP but will be incorporated in the final contract language. Specific service level agreements related to disaster recovery, backup, contingency and business/service continuity have been negotiated with Cerner to ensure VA requirements are met.</p> | No change required. |

EHRM External RFP Review Matrix

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| R#2-6 | <ul style="list-style-type: none"> • Cerner should essentially function as the primary workflow enablement layer, and would ideally be able to allow for data to flow freely across other clinical systems creating a robust 'healthcare operating system' | <p>IDIQ PWS Section 5.10.4: Seamless Interoperability / Joint Industry Outreach includes significant detail on the topic. The interoperability section is copied below this table for reference.</p> <p>IDIQ PWS section 5.5.4 Data Exchange - Application Program Interface (API) Gateway also includes detail on the creation of strategic open APIs.</p> <p>VA NF-177: Interoperability - Data Standards: The system shall support the use of the health data standards identified in the VA DoD Health Information Technical Standards Profile and by the VA DoD Interagency Clinical Informatics board, including following common data standards: National Information Exchange Model NIEM; Health Level 7 HL7; Logical Observation Identifiers, Names and Codes LOINC; Systematized Nomenclature of Medicine SNOMED; RxNorm, MedRT, ICD, CPT, HCPCS, Veteran Information Model VIM; and Healthcare Information Technology Standards Panel HITSP as well as VA/DOD/IPO extensions to these standards.</p> <p>VA-NF-T23: Informatics - Care Integrations: VA must be able to seamlessly integrate with HIE and external-to-EHR shared services to provide for a seamless experience and to more effectively integrate in community care efforts, as well as with other parts of VA (e.g., identity management). This includes but is not limited to the EHR product ability to support external shared services (SOA services, such as identity management, care plan service, scheduling, etc.) accessed via standards-based APIs. (Process Continuity, Evolution, Extension) KSR5 [NOW +]</p> <p>VA NF-Z11: Health Information Exchange: The system shall support VA electronic exchange of health records via other interoperable networks (e.g. CareQuality, CommonWell Health Alliance, DirectTrust, National Association for Trusted Exchange) by supporting their specifications, security and content specifications</p> | <i>No change required</i> |
| R#2-7 | <ul style="list-style-type: none"> • There needs to be a robust data abstraction layer that is FHIR enabled - much of this is already mentioned in section 5.5 | <p>IDIQ PWS Section 5.5.4: Data Exchange - Application Program Interface (API) Gateway includes significant detail including:</p> <p>a) Deliver and maintain fully tested contractor API Endpoints that return data defined by Cerner or by the latest Cerner supported open standards such as FHIR</p> <p>VANF-Z02: FHIR: System shall support the generation of FHIR resources in multiple versions in parallel (e.g.: DTSU 1.0, DTSU V2.0)</p> | <i>No change required.</i> |
| R#2-8 | <ul style="list-style-type: none"> • We should account for all elements of data flow and workflow, including the following: <ul style="list-style-type: none"> o Patient engagement o patient entered data o data from remote devices and sensors o claims data/ payor data o data flow from existing solutions such as VistA o data flow across other EMRs including Epic, Allscripts etc. - to meet and exceed needs around the Veterans Access, Choice and Accountability act | <p>IDIQ PWS Section 5.10.4: Seamless Interoperability / Joint Industry Outreach includes significant detail on the topic. The interoperability section is copied below this table for reference.</p> | <i>No change required.</i> |

EHRM External RFP Review Matrix

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| R#2-8 | <p>• I would also like to dig deeper with you around advanced analytics, enterprise data warehousing, and enablement of artificial intelligence and machine learning type capabilities</p> | <p>IDIQ PWS Section 5.10.2: Innovation Categories includes significant detail covering future-facing development. Specifically:</p> <p>d) An extension of the EHRM using either Contractor-dependent or independent technology. An example of an extension includes a new application such as a growth chart application or medication adherence application. An independent application may use Fast Healthcare Interoperability Resources (FHIR) and a SMART container to visualize the application in the EHRM. An example of a Contractor-dependent innovation is a similar application that leverages Contractor proprietary objects-oriented technologies and APIs to connect the application to the EHRM. The Task Order will describe the specific requirements of Contractor to sustain the extension. An extension will typically be owned by Contractor and licensed to the VA with unlimited rights and subsequently made available under an open source license such as APACHE, Version 2.</p> <p>e) An open innovation is a foundational, platform independent technology that may be utilized with Contractor solutions but has independent value outside of Contractor's platforms. Examples include Cerner terminologies, ontologies, methods of developing healthcare IT content, standards processes and rules, for example, such as those employed to program Cerner's population health solutions. Open innovation Intellectual Property (IP) will be committed to an open source community or public domain, as appropriate and mutually agreed to in a Task Order, by Contractor and the VA when such open innovation IP is necessary to realize a standardized implementation of platform-independent healthcare IT content.</p> <p>f) A joint contribution is an innovation created and developed by Contractor and the VA. If the VA is not contributing funds, then a CRADA may be negotiated to facilitate the Joint Contribution in coordination with the VA Technology Transfer Program (TTP). The VA may receive consideration in the form of software allowances, future licensing discounts, or other remuneration, according to parameters and amounts previously agreed by the Innovations Governance Board as documented in a written agreement subsequently incorporated into this contract or one of its Task orders, and joint inventors of patented inventions may receive royalties in these arrangements in accordance with patent license agreements to be established that are consistent with Contract Clause I.XXX, Patent Rights – Ownership by the Contractor, FAR 52.227-12, (DEC 2007). If the VA is also contributing funds, then an alternative cooperative development agreement may be required for Joint Contributions. Joint Innovations made in concert with the DoD may be developed under an Other Transaction Authority (OTA) agreement.</p> <p>g) A knowledge sharing innovation is a contribution to a standards organization or consortium to advance the knowledge set of the industry at large. Examples include contributions made to the ONC as part of the Direct Project or the CommonWell Health Alliance.</p> | <i>No change required</i> |
| R#2-9 | <p>Does the contract specify that this is a single instance shared by VA and DoD?</p> | <p>While the words 'single instance' do not appear in the contract, there are multiple references to 'single joint system', 'common system', etc. throughout the RFP as illustrated below.</p> <p>IDIQ PWS Background Section: EHRM is based on the electronic health record acquired by the Department of Defense known as the MHS GENESIS system, which is at its core, Cerner Millennium. The adoption of a single joint system between VA and DoD will allow all patient data to reside in a common system to have a seamless link between the DoD and VA. The DoD authorized system will be augmented to include additional functionality to meet VA requirements. Over time, the goal is the creation of an integrated inpatient and outpatient solution with software components that have been designed, integrated, maintained, and deployed with a design architecture that allows for access to and sharing of common data, common user interface, common workflows, common business rules, and common security framework that supports end-to-end healthcare related clinical and business operations.</p> | <i>No change required.</i> |

5.10.4 Seamless Interoperability / Joint Industry Outreach

The Contractor is required to collaborate with VA affiliates, community partners, EHR providers, healthcare providers, and vendors to advance seamless care throughout the health care provider market. Seamless care will require the creation of an integrated inpatient and outpatient solution with software components that have been designed, integrated, maintained, and deployed with a design architecture that allows for access to and sharing of common data and an enabling security framework that supports end-to-end healthcare related clinical and business operations. Seamless care is the experience patients and providers have moving from task to task and encounter to encounter within or between organizations such that high-quality decisions form easily and complete care plans execute smoothly. Information systems support the seamless-care experience by gathering data, interpreting data, presenting information, and managing tasks. Currently, industry lacks specific and uniform interoperability standards to support seamless care between organizations that employ different EHR systems. The Requirements Traceability Matrix Section D, Attachment 003, sets forth specific Informatics and Interoperability contract requirements. To accomplish this, the Contractor shall provide software and services to enable seamless care between VA encounters, encounters with other Government healthcare institutions, and outside entities through advancements in all areas of the EHR that occur. In addition, the software and services shall support the VA designated standards, such as SMART on FHIR and SMART-enabled applications, or other published standards.

The objective of these interoperability solutions is to advance the state of the art supporting seamless care for Veterans. Existing organizations promoting interoperability among EHR vendors, such as The Argonaut Project, have developed or are planning to develop technology standards or technical approaches that may support the EHRM seamless care strategy. To the extent that underlying third party technology is available or made available to meet the following timelines, the following interoperability software solutions and services shall be delivered under this section:

- a) By Initial Operating Capability (IOC), the Contractor shall provide a software solution enabling VA, DoD and community providers who have connected to the EHRM to share interactive care plans (ICPs) for Veterans. ICPs will enable collaborative communication between providers, and between providers and Veterans, in managing Veteran care.
- b) Within 24 months of applicable task order award, the Contractor shall provide a software solution enabling VA, DoD and connected community providers to complete referral management activities for Veterans.
- c) By IOC, the Contractor shall provide a software solution enabling VA to release and consume, via on-demand access, a Veteran's complete longitudinal health record to and from DoD and connected community partners, irrespective of which EHR they use, provided such EHR technology is certified by the Health and Human Services Office of the National Coordinator (ONC) or its successor. The longitudinal record solution shall support Provider-to-Provider record sharing, as well as Provider-Veteran-Provider sharing (Veteran mediated record sharing), including appropriate consent management. The bi-directional health information exchange shall maximize use of discrete data that supports context-driven clinical decisions and informatics.
- d) Within 24 months of applicable task order award, the Contractor shall provide a software solution enabling connected VA, DoD and community providers ~~connected to the EHRM to send and receive Admission/Discharge/Transfer notifications "pushed" from the provider initiating a Veteran care event to enable~~

5.10.4.1 Data Design and Information Sharing

In support of the interoperability objectives under this Section, agreed upon Contractor proprietary information/data model extension points (e.g., ingestion and record APIs) may be provided to both international and national standards designating organizations as described and set forth in an applicable Task Order. The Contractor shall provide VA access and usage rights into any underlying proprietary terminology/code systems for the purpose of enhancing national standards to address any gaps identified in the EHRM solution. The Contractor shall also make the interoperability capabilities and product enhancements developed under this contract available to non-VA Cerner clients.

5.10.4.2 VA Digital Health Platform/Digital Veterans Platform Integration

VA anticipates developing a Digital Health Platform/Digital Veterans Platform (DVP) to consolidate critical VA EHR and non-EHR operational systems. The Contractor shall integrate the EHRM to interoperate with DVP, or future state VA platform, including the DVP API gateway or any other method designated by VA.

EHRM External RFP Review Matrix

| Item # | Comment | Response | Modifications to RFP |
|--------|--|---|-----------------------------------|
| R#3-1 | <p>I reviewed the material you sent regarding the proposed VA EMR contract and statement of work. I have one area of concern regarding the interoperability of the system with community care providers. For the new VA EMR to efficiently serve patients, maximize safety and lower medical costs, medical records from the military, VA and community care providers under contract must be viewable in a seamless electronic format. The language of the contract and statement of work do not require this of the Cerner system.</p> <p>I reviewed the material you sent regarding the proposed VA EMR contract and statement of work. I have one area of concern regarding the interoperability of the system with community care providers. For the new VA EMR to efficiently serve patients, maximize safety and lower medical costs, medical records from the military, VA and community care providers under contract must be viewable in a seamless electronic format. The language of the contract and statement of work do not require this of the Cerner system.</p> <p>In my experience using 3 versions of the Cerner EMR, the records from outside providers are imported as a CCD or CCA file and labeled as "Outside Material" with no way to identify file content or correlate internal study results with similar outside studies. For example a fax with a coronary angiogram report and a colonoscopy report will</p> | <p>IDIQ PWS Section 5.10.4: Seamless Interoperability / Joint Industry Outreach: includes significant detail and timeframes on the topic. The entire interoperability section is copied below this table for reference.</p> <p>The objective of these interoperability solutions is to advance the state of the art supporting seamless care for Veterans. Existing organizations promoting interoperability among EHR vendors, such as The Argonaut Project, have developed or are planning to develop technology standards or technical approaches that may support the EHRM seamless care strategy. To the extent that underlying third party technology is available or made available to meet the following timelines, the following interoperability software solutions and services shall be delivered under this section:</p> <p>VA-NF-T46 Legal Discovery The system shall support provenance (chain of custody or ownership) and pedigree (processing history how the data was produced or incorporated) and enable identification, collection, and production of data according to source, custody and ownership and display of data in business, logical, legal or physical models.</p> <p>VA-FR-19: Manage Clinical Documents. k. Includes the ability to upload graphs, color images, and drawings that are viewable in the EHR and integrated with applications to support comparison of examination findings over time.</p> <p>l. Include the ability to link scanned or other electronic documents to a specific document in the health record.</p> <p>m. Includes capturing VA and Non VA Community Based Services.</p> <p>IDIQ PWS Section 5.5.1: Workflow Development and Normalization</p> <p>j) The Contractor shall enable configuration of the application that supports external community data without requiring the clinician to go to special screens to see and use reconciled external data. By IOC entry, the Contractor shall support incorporation of the following external community data domains, including but not limited to these domains and sub-domains:</p> <ul style="list-style-type: none"> • Problems • Allergies • Home Medications • Procedures - including associated reports and with appropriately filtered CPT codes • Immunizations • Discharge Summaries <p>5.10.4 Seamless Interoperability / Joint Industry Outreach</p> <p>The Contractor is required to collaborate with VA affiliates, community partners, EHR providers, healthcare providers, and vendors to advance seamless care throughout the health care provider market. Seamless care will require the creation of an integrated inpatient and outpatient solution with software components that have been designed, integrated, maintained, and deployed with a design architecture that allows for access to and sharing of common data and an enabling security framework that supports end-to-end healthcare related clinical and business operations. Seamless care is the experience patients and providers have moving from task to task and encounter to encounter within or between organizations such that high-quality decisions form easily and complete care plans execute smoothly. Information systems support the seamless-care experience by gathering data, interpreting data, presenting information, and managing tasks. Currently, industry lacks specific and uniform interoperability standards to support seamless care between organizations that employ different EHR systems. The Requirements Traceability Matrix Section D, Attachment 003, sets forth specific Informatics and Interoperability contract requirements. To accomplish this, the Contractor shall provide software and services to enable seamless care between VA encounters, encounters with other Government healthcare institutions, and outside entities through advancements in all areas of the EHR that occur. In addition, the software and services shall support the VA designated standards, such as SMART on FHIR and SMART-enabled applications, or other published standards.</p> <p>The objective of these interoperability solutions is to advance the state of the art supporting seamless care for Veterans. Existing organizations promoting interoperability among EHR vendors, such as The Argonaut Project, have developed or are planning to develop technology standards or technical approaches that may support the EHRM seamless care strategy. To the extent that underlying third party technology is available or made available to meet the following timelines, the following interoperability software solutions and services shall be delivered under this section:</p> <p>a) By Initial Operating Capability (IOC), the Contractor shall provide a software solution enabling VA, DoD and community providers who have connected to the EHRM to share interactive care plans (ICPs) for Veterans. ICPs will enable collaborative communication between providers, and between providers and Veterans, in managing Veteran care.</p> <p>b) Within 24 months of applicable task order award, the Contractor shall provide a software solution enabling VA, DoD and connected community providers to complete referral management activities for Veterans.</p> <p>c) By IOC, the Contractor shall provide a software solution enabling VA to release and consume, via on-demand access, a Veteran's complete longitudinal health record to and from DoD and connected community partners, irrespective of which EHR they use, provided such EHR technology is certified by the Health and Human Services Office of the National Coordinator (ONC) or its successor. The longitudinal record solution shall support Provider-to-Provider record sharing, as well as Provider-Veteran-Provider sharing (Veteran mediated record sharing), including appropriate consent management. The bi-directional health information exchange shall maximize use of discrete data that supports context-driven clinical decisions and informatics.</p> | <p><i>No change required.</i></p> |

EHRM External RFP Review Matrix

- d) Within 24 months of applicable task order award, the Contractor shall provide a software solution enabling connected VA, DoD and community providers connected to the EHRM to send and receive Admission/Discharge/Transfer notifications “pushed” from the provider initiating a Veteran care event to enable proactive engagement by VA care coordinators when notified of a Veteran care event.
- e) Within 24 months of applicable task order award, the Contractor will demonstrate a solution for identification and management of Veterans at high risk of suicide, in collaboration with community partners.
- f) By IOC, the contractor shall provide URL based image access to the VA, community and academic partner systems who can support the URL and a viewer to the providers via the health information exchange networks. Within 36 months of applicable task order award, the Contractor shall provide a software solution enabling VA, DoD and community providers connected to the EHRM to have nationwide access to Veterans’ imaging associated with diagnostic tests.
- g) By IOC, the Contractor shall provide a software solution for multilateral standards-based ingestion, normalization, storage, and exporting of Health Information Exchange acquired Veteran health information. The Contractor shall ensure that the solution provides a computable dataset for purposes of population health and research analytics, clinical decision support, and workflow integration.
- h) By IOC, the Contractor shall provide the capability to connect and exchange VA electronic health records via other interoperable networks, such as eHealth Exchange, CareQuality, CommonWell Health Alliance, DirectTrust, National Association for Trusted Exchange by supporting their specifications, security and content specifications. Contractor shall support network record locator services and patient provider associations as applicable in accordance with applicable technical standards and the Trusted Exchange Framework and Common Agreement (TEFCA).
- i) By IOC, the Contractor shall provide a capability for provider collaboration via secure e-mail using the ONC Direct protocol or future VA-designated standard within a Cerner Millennium EHR workflow context.
- j) Within 36 months of applicable task order award, the Contractor shall provide a solution for a Software Development Kit (SDK) enabling standards-based applications (e.g., SMART, FHIR, etc.) integrated with EHRM solutions and platforms.
- k) Cerner shall deliver annually an Interoperability Plan to the VA on how it intends to meet the objectives established in PWS section 5.10.4. The initial plan will be due within 3 months of applicable TO award.
- l) The Contractor shall conduct an annual Interoperability Self-Assessment against standards that shall be specified by VA, such as those promulgated by HIMSS or future standards to be identified by VA. The annual self assessment shall report on the state of each data element (e.g., which are supported in what capacities and in which formats). This will help assure standards implementation consistency and assure standards compliance with evolving national standards.
- m) The Contractor shall support Knowledge Interoperability by supporting the extension of clinical content assets such as terminologies, clinical decision support rules, and order sets, etc., to the extent such extensions are consistent with the model and best practices of the controlling national standard. This includes the ability to curate, extend, and share that knowledge with clinical partners. This fosters rapid adoption from industry best practices, e.g., clinical professional societies.

5.10.4.1 Data Design and Information Sharing

In support of the interoperability objectives under this Section, agreed upon Contractor proprietary information/data model extension points (e.g., ingestion and record APIs) may be provided to both international and national standards designating organizations as described and set forth in an applicable Task Order. The Contractor shall provide VA access and usage rights into any underlying proprietary terminology/code systems for the purpose of enhancing national standards to address any gaps identified in the EHRM solution. The Contractor shall also make the interoperability capabilities and product enhancements developed under this contract available to non-VA Cerner clients.

5.10.4.2 VA Digital Health Platform/Digital Veterans Platform Integration

VA anticipates developing a Digital Health Platform/Digital Veterans Platform (DVP) to consolidate critical VA EHR and non-EHR operational systems. The Contractor shall integrate the EHRM to interoperate with DVP, or future state VA platform, including the DVP API gateway or any other method designated by VA.

EHRM External RFP Review Matrix

| Item # | Comment | Response | Modifications to RFP |
|--------|---|---|-----------------------------------|
| R#4-1 | <p>So far, I have no real concerns. However.... might you be able to help me find the place in the documents, if any, where we might be 'informing' Cerner of our expectations related to staff engagement in the assessment phase? Please allow me to share my only real concern (related to mistakes we made, and mistakes I hope The VA can avoid).</p> <p>Once our projects were launched for our deployment of Epic, we began to meet routinely with groups of users. As an example, we would meet with a group of our Oncology faculty, to define functional requirements that were specific to complex chemotherapeutic order sets and pathways. It would take hours, and hours, to 'get it right'. We would discuss areas of agreement, and areas of disagreement. We would describe the approach to resolving differences. Most folks would appreciate the need for compromise, but some specific requirements were assumed to be absolute. And folks were truly engaged, and optimistic. However, when the ultimate product was implemented, the 'absolute' items were sometimes missing. And although there were great explanations for the choices that had to be made, the end-users were sometimes stunned by what they perceived to be blatant disregard for their requirements, and often very disappointed. IN some cases, it took weeks (months?) to find a rational and reasonable solution – to a</p> | <p>Some of the responsibility for your concerns on staff engagement fall on VA's management of the project, and some falls on Cerner's change management and deployment process. That said, the RFP only addresses the Cerner side of the responsibility for this. Here are some of the sections in the IDIQ PWS where Cerner responsibility for workflows/change management/training are discussed .</p> <p>Section 5.1 Project Management (note this section is very high level, but includes requirements for Cerner to participate/plan/support many aspects of the project related to your question) Section 5.1.1: provide project management support of: communications, project change, organization change, and value Section 5.1.3: provide strategy and planning support of: workflows, training, change management, synchronization with DoD (which may have a big impact on VA and DoD user processes) Section 5.1.5: provide requirements and analysis support on : use cases, change management, business process modeling, workflow management, site-specific requirements Section 5.1.9: provide an implementation plan including discussion of deployment, training, and change management; emphasis on user role definitions; recommend change management activities; participate in business process re-engineering discussions; analyze Cerner workflows vs. VA workflows and provide recommendations on process re-engineering, change management and product configuration Section 5.1.11: Value reporting including reporting on clinical staff experience</p> <p>Section 5.5: VA Enterprise EHRM Baseline Preparation (this section has more details and is concerned with the enterprise level work that must be completed before the first deployment site can go live) Section 5.5.1: Workflow development and normalization : some language on configuration of workflows to meet VA-specific requirements; emphasis on configuration to improve clinician access to external data. Section 5.5.6: Training Plans and Materials: training plans and materials tailored to VA environment; includes tailoring to the localized business process and standard operating procedures by user role Section 5.5.7: Organizational Change Management: Lots of information here – probably the most pertinent to your comment.</p> <p>Section 5.6: Wave Planning and Deployment: (this section has some detail on the aspects of the deployment process focused on user understanding and input to the workflows being implemented) Section 5.6.2: VA Current Site Assessment: Identify site-specific risks/unique areas; fine-tune the user adoption strategy/categorize the level of clinical process</p> | <p>No change required.</p> |
| R#4-2 | <p>I have identified no significant issues. As you appropriately indicated, the document is the summary of thousands of hours of hard work and the contributions of many. And, more importantly, you are purchasing a product, not building a city. You have captured much of what I would expect to be included.</p> <p>To some degree, my concerns are related to the ability to ensure success or measure success, or identify success - or failure. I worry NOT that you haven't included the appropriate level of requirements, but that, in fact you have included them, but may not be able to ascertain the delivery of the requirements, or the satisfaction of the goals, or the realization of the deliverables. I am concerned that you may not have the appropriate governance processes in place, in partnership with the contractor, to accurately or comprehensively realize that you have, or have not, received what has been identified, or what is required, or what is expected. I see evidence of great expectations, but I can't seem to locate the methodology by which you will be able to ensure that your vendor has delivered what has been identified and the degree of quality that exists within the deliverable.</p> <p>Examples are throughout.... change management, workflow changes, enhancement to processes, culture change, safety, efficiencies, etc.</p> | <p>We have not defined many crystal clear metrics at the IDIQ level – primarily because the IDIQ covers so many different topics that would have different metrics attached to each: hosting, deployment, training, change management. Each of these will have metrics spelled out along with a Quality Assurance Surveillance Plan (describing how VA will monitor the metrics) tailored to each individual task order as they are issued. We do have high level metrics for system availability: 99.9%, and for Cerner to provide no less than the commercial service level agreement that is provided to all other customers. We also anticipate that metrics will change over the 10 year course of the contract as we become smarter about what to measure and how to declare success. So, as you stated, there are not many detailed metrics stated at the IDIQ level.</p> <p>However, there are a lot of work well underway at VA to address your concerns – this work is not documented in the RFP since it is VA responsibility, and therefore not a Cerner contract item:</p> <ul style="list-style-type: none"> o Set up joint governance boards with the DoD o Set up enterprise VA governance over clinical workflows/configurations/and issue resolution o Set up VA local governance for each site deployment o Set up VA communication, site logistic and pre-deployment infrastructure upgrade teams o Document current VistA performance levels as a baseline o Develop value measurement processes o Create specific performance metrics for each task order: (e.g. 'definition of done' for deployment – what benchmarks have to be achieved before Cerner can leave the deployment site, user adoption rates? Clinician satisfaction? Successful independent testing? etc. – all this is underway and incorporating lessons learned from the initial DoD implementation) <p>VA and DoD will be sharing an instance of the commercial Cerner product based in the Cerner data center conforming to Cerner commercial service level agreements. Note that specific service level agreements will be determined for each task order.</p> <p>IDIQ PWS section 5.3.3 System Quality and Performance Measures and Monitoring</p> <p>The Contractor shall provide its commercial performance measurement system for system acceptance for discussion and review with VA. The Contractor shall conduct analysis and design activities for system quality and performance. The Contractor shall provide performance and availability trend analysis and supporting data in the Monthly Progress Report to show prediction, trending, and monitoring of system's performance trends. The Contractor is responsible for reporting all issues or errors</p> <p>5.10.4 Seamless Interoperability / Joint Industry Outreach</p> | <p>No change required.</p> |

EHRM External RFP Review Matrix

The Contractor is required to collaborate with VA affiliates, community partners, EHR providers, healthcare providers, and vendors to advance seamless care throughout the health care provider market. Seamless care will require the creation of an integrated inpatient and outpatient solution with software components that have been designed, integrated, maintained, and deployed with a design architecture that allows for access to and sharing of common data and an enabling security framework that supports end-to-end healthcare related clinical and business operations. Seamless care is the experience patients and providers have moving from task to task and encounter to encounter within or between organizations such that high-quality decisions form easily and complete care plans execute smoothly. Information systems support the seamless-care experience by gathering data, interpreting data, presenting information, and managing tasks. Currently, industry lacks specific and uniform interoperability standards to support seamless care between organizations that employ different EHR systems. The Requirements Traceability Matrix Section D, Attachment 003, sets forth specific Informatics and Interoperability contract requirements. To accomplish this, the Contractor shall provide software and services to enable seamless care between VA encounters, encounters with other Government healthcare institutions, and outside entities through advancements in all areas of the EHR that occur. In addition, the software and services shall support the VA designated standards, such as SMART on FHIR and SMART-enabled applications, or other published standards.

The objective of these interoperability solutions is to advance the state of the art supporting seamless care for Veterans. Existing organizations promoting interoperability among EHR vendors, such as The Argonaut Project, have developed or are planning to develop technology standards or technical approaches that may support the EHRM seamless care strategy. To the extent that underlying third party technology is available or made available to meet the following timelines, the following interoperability software solutions and services shall be delivered under this section:

- a) By Initial Operating Capability (IOC), the Contractor shall provide a software solution enabling VA, DoD and community providers who have connected to the EHRM to share interactive care plans (ICPs) for Veterans. ICPs will enable collaborative communication between providers, and between providers and Veterans, in managing Veteran care.
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- c) By IOC, the Contractor shall provide a software solution enabling VA to release and consume, via on-demand access, a Veteran's complete longitudinal health record to and from DoD and connected community partners, irrespective of which EHR they use, provided such EHR technology is certified by the Health and Human Services Office of the National Coordinator (ONC) or its successor. The longitudinal record solution shall support Provider-to-Provider record sharing, as well as Provider-Veteran-Provider sharing (Veteran mediated record sharing), including appropriate consent management. The bi-directional health information exchange shall maximize use of discrete data that supports context-driven clinical decisions and informatics.
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- f) By IOC, the contractor shall provide URL based image access to the VA, community and academic partner systems who can support the URL and a viewer to the providers via the health information exchange networks. Within 36 months of applicable task order award, the Contractor shall provide a software solution enabling VA, DoD and community providers connected to the EHRM to have nationwide access to Veterans' imaging associated with diagnostic tests.
- g) By IOC, the Contractor shall provide a software solution for multilateral standards-based ingestion, normalization, storage, and exporting of Health Information Exchange acquired Veteran health information. The Contractor shall ensure that the solution provides a computable dataset for purposes of population health and research analytics, clinical decision support, and workflow integration.
- h) By IOC, the Contractor shall provide the capability to connect and exchange VA electronic health records via other interoperable networks, such as eHealth Exchange, CareQuality, CommonWell Health Alliance, DirectTrust, National Association for Trusted Exchange by supporting their specifications, security and content specifications. Contractor shall support network record locator services and patient provider associations as applicable in accordance with applicable technical standards and the Trusted Exchange Framework and Common Agreement (TEFCA).
- i) By IOC, the Contractor shall provide a capability for provider collaboration via secure e-mail using the ONC Direct protocol or future VA-designated standard within a Cerner Millennium EHR workflow context.
- j) Within 36 months of applicable task order award, the Contractor shall provide a solution for a Software Development Kit (SDK) enabling standards-based applications (e.g., SMART, FHIR, etc.) integrated with EHRM solutions and platforms.
- k) Cerner shall deliver annually an Interoperability Plan to the VA on how it intends to meet the objectives established in PWS section 5.10.4. The initial plan will be due within 3 months of applicable TO award.
- l) The Contractor shall conduct an annual Interoperability Self-Assessment against standards that shall be specified by VA, such as those promulgated by HIMSS or future standards to be identified by VA. The annual self assessment shall report on the state of each data element (e.g., which are supported in what capacities and in which formats). This will help assure standards implementation consistency and assure standards compliance with evolving national standards.
- m) The Contractor shall support Knowledge Interoperability by supporting the extension of clinical content assets such as terminologies, clinical decision support rules, and order sets, etc., to the extent such extensions are consistent with the model and best practices of the controlling national standard. This includes the ability to curate, extend, and share that knowledge with clinical partners. This fosters rapid adoption from industry best practices, e.g., clinical professional societies.

5.10.4.1 Data Design and Information Sharing

EHRM External RFP Review Matrix

In support of the interoperability objectives under this Section, agreed upon Contractor proprietary information/data model extension points (e.g., ingestion and record APIs) may be provided to both international and national standards designating organizations as described and set forth in an applicable Task Order. The Contractor shall provide VA access and usage rights into any underlying proprietary terminology/code systems for the purpose of enhancing national standards to address any gaps identified in the EHRM solution. The Contractor shall also make the interoperability capabilities and product enhancements developed under this contract available to non-VA Cerner clients.

5.10.4.2 VA Digital Health Platform/Digital Veterans Platform Integration

VA anticipates developing a Digital Health Platform/Digital Veterans Platform (DVP) to consolidate critical VA EHR and non-EHR operational systems. The Contractor shall integrate the EHRM to interoperate with DVP, or future state VA platform, including the DVP API gateway or any other method designated by VA.

EHRM External RFP Review Matrix

| Item # | Comment | Response | Modifications to RFP |
|--------|--|---|-----------------------------------|
| R#5-1 | <p>I thought that another reviewer made a good case for inserting specific definitions and standards on the meaning and use of "interoperability," especially since that term has as many meanings in the industry as those who speak it. It is so easy for the contractor to proceed down a design path using one definition or standard while the users will require a totally different standard. That runs the risk of not being discovered until later, perhaps even up to implementation, a very costly result. Perhaps a similar problem (a seemingly big problem) that the DOD implementation faces now where the users are rebelling. Unfortunately, if this "gap" in definition is not discovered until IOC, it will be very difficult and very expensive to fix (ala the DOD problem). Why not set the critical definitions and standards in the contract (PWS) now and eliminate the chance for any confusion or ambiguity. It will pay dividends later in terms of less arguments, better initial design, happier user community, less overall cost, better healthcare delivery, etc. Then, with the standard fully defined and set in the original PWS, the mock-up test will be much sooner in time and much more complete the first time, allowing the users to provide input sooner and better, eliminating costly design mistakes from the beginning. The user community can tell you today what is needed to accomplish this "next generation" system that will be a model for the country and the future of healthcare. Why would you not want to tell the</p> | <p>IDIQ PWS 5.5.1: Workflow Development and Normalization:</p> <p>j) The Contractor shall enable configuration of the application that supports external community data without requiring the clinician to go to special screens to see and use reconciled external data. By IOC entry, the Contractor shall support incorporation of the following external community data domains, including but not limited to these domains and sub-domains:</p> <ul style="list-style-type: none"> • Problems • Allergies • Home Medications • Procedures - including associated reports and with appropriately filtered CPT codes • Immunizations • Discharge Summaries • Progress Notes • Consult Notes • History & Physicals • Operative Notes • Radiology and Diagnostic Reports (Into "Documentation" component) <p>By IOC exit, the Contractor shall support incorporation of the following external community data domains, including but not limited to these domains and sub-domains:</p> <ul style="list-style-type: none"> • Results <ul style="list-style-type: none"> o Labs - General - Pathology and Microbiology o Vitals • Radiology and Diagnostic Reports (Into "Diagnostic Report" component) • Images <p>IDIQ PWS Section 5.10.4: Seamless Interoperability / Joint Industry Outreach includes significant detail on the topic. The interoperability section is copied below this table for reference.</p> | <p><i>No change required.</i></p> |
| R#5-2 | <p>I was also thinking about the current reported problems of the DOD implementation seemingly caused by a user (clinician) revolt over inadequacy (or unsuitability) for their needs. The VA runs that same risk. Perhaps that problem could be a benefit to your effort. Why not accumulate all of the user complaints/issues in the DOD implementation identified by the users and chart them out. Then identify which of those issues would be issues if they existed in the VA implementation and include them in the contract as definitional requirements. You have the benefit of knowing the failures in the very system upon which you are modeling your system...and you have an added advantage and opportunity to contractually prevent similar mistakes.</p> | <p>VA has had frequent communication with DoD on lessons learned and incorporated that information throughout the contract. Topics incorporated include:</p> <ul style="list-style-type: none"> - Management, tracking and reporting of trouble tickets - Emphasis on change management and training - Emphasis on in-person help desk support until 90 days after go-live - Language for additional training and on-site support in assignment of user roles - Tailoring of Cerner training to the workflows being implemented at each site - Require tailored training materials and tip sheets by user role - Ensure that training focuses on clinical workflows as well as technical aspects of the implementation - Language requiring a single Cerner POC for VA with authority over all activities supporting the VA solution regardless of the legal entity responsible for the support. <p>Additionally, VA has incorporated DoD lessons learned in VA activities outside the Cerner contract. These include:</p> <ul style="list-style-type: none"> - Set up joint governance boards with the DoD - Set up enterprise VA governance over clinical workflows/configurations/and issue resolution - Set up VA local governance for each site deployment - Set up VA communication, site logistic and pre-deployment infrastructure upgrade teams - Plans for a contracting 101 course to educate Cerner on staying within scope of each task order requirements. | <p><i>No change required.</i></p> |

5.10.4 Seamless Interoperability / Joint Industry Outreach

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- k) Cerner shall deliver annually an Interoperability Plan to the VA on how it intends to meet the objectives established in PWS section 5.10.4. The initial plan will be due within 3 months of applicable TO award.
- l) The Contractor shall conduct an annual Interoperability Self-Assessment against standards that shall be specified by VA, such as those promulgated by HIMSS or future standards to be identified by VA. The annual self assessment shall report on the state of each data element (e.g., which are supported in what capacities and in which formats). This will help assure standards implementation consistency and assure standards compliance with evolving national standards.
- m) The Contractor shall support Knowledge Interoperability by supporting the extension of clinical content assets such as terminologies, clinical decision support rules, and order sets, etc., to the extent such extensions are consistent with the model and best practices of the controlling national standard. This includes the ability to curate, extend, and share that knowledge with clinical partners. This fosters rapid adoption from industry best practices, e.g., clinical professional societies.

5.10.4.1 Data Design and Information Sharing

In support of the interoperability objectives under this Section, agreed upon Contractor proprietary information/data model extension points (e.g., ingestion and record APIs) may be provided to both international and national standards designating organizations as described and set forth in an applicable Task Order. The Contractor shall provide VA access and usage rights into any underlying proprietary terminology/code systems for the purpose of enhancing national standards to address any gaps identified in the EHRM solution. The Contractor shall also make the interoperability capabilities and product enhancements developed under this contract available to non-VA Cerner clients.

5.10.4.2 VA Digital Health Platform/Digital Veterans Platform Integration

VA anticipates developing a Digital Health Platform/Digital Veterans Platform (DVP) to consolidate critical VA EHR and non-EHR operational systems. The Contractor shall integrate the EHRM to interoperate with DVP, or future state VA platform, including the DVP API gateway or any other method designated by VA.

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| Item # | Comment | Response | Modifications to RFP |
|--------|---|---|-----------------------------------|
| R#6-1 | <p>Read and write of all patient specific data through FHIR APIs and services by [specific date] post signing</p> <p>a. Cerner progress on comprehensive support of FHIR has been slow. Only a few development resources are working on FHIR services. There should be timelines or at least a resource commitment of some kind to make sure continued development of FHIR resources is a priority.</p> | <p>IDIQ PWS Section 5.10.4: Seamless Interoperability / Joint Industry Outreach includes significant detail and timeframes on the topic. The entire interoperability section is copied below this table for reference.</p> <p>IDIQ PWS section 5.5.4 Data Exchange - Application Program Interface (API) Gateway also includes detail on the creation of strategic open APIs.</p> <p>VA NF-177: Interoperability - Data Standards: The system shall support the use of the health data standards identified in the VA DoD Health Information Technical Standards Profile and by the VA DoD Interagency Clinical Informatics board, including following common data standards: National Information Exchange Model NIEM; Health Level 7 HL7; Logical Observation Identifiers, Names and Codes LOINC; Systematized Nomenclature of Medicine SNOMED; RxNorm, MedRT, ICD, CPT, HCPCS, Veteran Information Model VIM; and Healthcare Information Technology Standards Panel HITSP as well as VA/DOD/IPO extensions to these standards.</p> <p>VA-NF-T23: Informatics - Care Integration: VA must be able to seamlessly integrate with HIE and external-to-EHR shared services to provide for a seamless experience and to more effectively integrate in community care efforts, as well as with other parts of VA (e.g., identity management). This includes but is not limited to the EHR product ability to support external shared services (SOA services, such as identity management, care plan service, scheduling, etc.) accessed via standards-based APIs. (Process Continuity, Evolution, Extension) KSR5 [NOW +]</p> <p>VA NF-Z11: Health Information Exchange: The system shall support VA electronic exchange of health records via other interoperable networks (e.g. CareQuality, CommonWell Health Alliance, DirectTrust, National Association for Trusted Exchange) by supporting their specifications, security and content specifications</p> | <p><i>No change required.</i></p> |
| R#6-2 | <p>Support for CDS hooks.</p> | <p>IDIQ PWS 5.5.1: Workflow Development and Normalization: Within 36 months of the IDIQ award, provider workflows will be optimized to leverage discreet data domains listed in Section 5.5.1 j) using Clinical Decision Support hooks (CDS hooks) or other techniques to reduce clinician burden.</p> <p>Discrete data domains referenced above:</p> <p>j) The Contractor shall enable configuration of the application that supports external community data without requiring the clinician to go to special screens to see and use reconciled external data. By IOC entry, the Contractor shall support incorporation of the following external community data domains, including but not limited to these domains and sub-domains:</p> <ul style="list-style-type: none"> • Problems • Allergies • Home Medications • Procedures - including associated reports and with appropriately filtered CPT codes • Immunizations • Discharge Summaries • Progress Notes • Consult Notes • History & Physicals • Operative Notes • Radiology and Diagnostic Reports (Into "Documentation" component) <p>By IOC exit, the Contractor shall support incorporation of the following external community data domains, including but not limited to these domains and sub-domains:</p> <ul style="list-style-type: none"> • Results <ul style="list-style-type: none"> o Labs - General - Pathology and Microbiology o Vitals | <p><i>No change required.</i></p> |
| R#6-3 | <p>Support for an HL7 approved publish and subscribe (pub/sub) infrastructure and services.</p> | <p>IDIQ PWS Section 5.5.4: Data Exchange - Application Program Interface (API) Gateway:</p> <p>f) As it relates to FHIR, the Contractor shall provide an opportunity for joint collaboration in prioritization of the API roadmap. This support shall occur where VA data required maps to a FHIR (HL7 Fast Healthcare Interoperability Resources) resource that is currently in the FHIR Roadmap and not part of the software's out-of-the-box FHIR resource offerings</p> <p>VA NF-177: Interoperability - Data Standards: The system shall support the use of the health data standards identified in the VA DoD Health Information Technical Standards Profile and by the VA DoD Interagency Clinical Informatics board, including following common data standards: National Information Exchange Model NIEM; Health Level 7 HL7; Logical Observation Identifiers, Names and Codes LOINC; Systematized Nomenclature of Medicine SNOMED; RxNorm, MedRT, ICD, CPT, HCPCS, Veteran Information Model VIM; and Healthcare Information Technology Standards Panel HITSP as well as VA/DOD/IPO extensions to these standards.</p> | <p><i>No change required.</i></p> |

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| R#6-4 | Support model driven application development tools that use FHIR resources and profiles | <p>IDIQ PWS Section 5.5.4: Data Exchange - Application Program Interface (API) Gateway: f) As it relates to FHIR, the Contractor shall provide an opportunity for joint collaboration in prioritization of the API roadmap. This support shall occur where VA data required maps to a FHIR (HL7 Fast Healthcare Interoperability Resources) resource that is currently in the FHIR Roadmap and not part of the software's out-of-the-box FHIR resource offerings i) Ensure Substitutable Medical Applications and Reusable Technologies (SMART) compliance to support SMART on FHIR applications. j) Provide standards-based API access (e.g. FHIR) to all patient data from the VA-designated authoritative data sources for the patient's record within the Contractors' product suite.</p> <p>IDIQ PWS Section 5.10.4: Seamless Interoperability / Joint Industry Outreach j) Within 36 months of applicable task order award, the Contractor shall provide a solution for a Software Development Kit (SDK) enabling standards-based applications (e.g., SMART, FHIR, etc.) integrated with EHRM solutions and platforms.</p> | |
| R#6-5 | Support a "time drive" infrastructure and services. | | <i>No change required.</i> |
| R#6-6 | Provide a terminology server that is compliant with the FHIR Terminology Module | <p>Note: Cerner notes that it has the capability to return terminology in a FHIR resource request, but do not have a FHIR server for terminology lookup from outside today, since that is something that should be hosted by an outside group. Cerner proposes to work with Argonauts or the driving standards group to set up an additional server for lookup needed.</p> <p>IDIQ PWS Section 5.10.4: Seamless Interoperability / Joint Industry Outreach: l) The Contractor shall conduct an annual Interoperability Self-Assessment against standards that shall be specified by VA, such as those promulgated by HIMSS or future standards to be identified by VA. The annual self assessment shall report on the state of each data element (e.g., which are supported in what capacities and in which formats). This will help assure standards implementation consistency and assure standards compliance with evolving national standards. m) The Contractor shall support Knowledge Interoperability by supporting the extension of clinical content assets such as terminologies, clinical decision support rule</p> | <i>No change required.</i> |
| R#6-7 | Support a knowledge repository for all kinds of knowledge artifacts: CDS logic, FHIR profiles, order sets, workflows, etc. | <p>IDIQ PWS Section 5.10.4: Seamless Interoperability / Joint Industry Outreach: g) By IOC, the Contractor shall provide a software solution for multilateral standards-based ingestion, normalization, storage, and exporting of Health Information Exchange acquired Veteran health information. The Contractor shall ensure that the solution provides a computable dataset for purposes of population health and research analytics, clinical decision support, and workflow integration.</p> | <i>No change required.</i> |
| R#6-8 | Provide the ability for the VA to quickly change workflows. Currently, workflows are hard coded into the applications. It makes it nearly impossible to change workflows to accommodate changes in clinical practice. | VA is committed to setting an enterprise-level set of commonly shared workflows across VA and DoD wherever feasible. Joint VA/DoD governance boards as well as VA enterprise and local VAMC boards are being created to ensure that workflows are standardized as much as feasible and not customized to each implementation. That said, considerable configuration capabilities are included in the commercial product which can be used to adjust workflows without deviating from the commercial baseline. | <i>No change required.</i> |
| R#6-9 | Specify the time frame after a new version of FHIR is approved that Cerner will upgrade its services – one year? | Note: Cerner has prioritized an additional 40 engineers to accelerate FHIR APIs for VA in support of this contract. There is no specified timeframe for Cerner upgrades in response to new FHIR versions. | <i>No change required.</i> |
| R#6-10 | 10. Support VA or other 3rd party defined FHIR profiles a. Use of FHIR profiles in model driven application development b. Ability to test conformance of an application to a specific set of FHIR profiles c. Services automatically test conformance to profiles in the Cerner FHIR services | <p>IDIQ PWS section 5.5.4 Data Exchange - Application Program Interface (API) Gateway: includes detail on the creation of strategic open APIs. f) As it relates to FHIR, the Contractor shall provide an opportunity for joint collaboration in prioritization of the API roadmap. This support shall occur where VA data required maps to a FHIR (HL7 Fast Healthcare Interoperability Resources) resource that is currently in the FHIR Roadmap and not part of the software's out-of-the-box FHIR resource offerings</p> <p>VA NF-177: Interoperability - Data Standards: The system shall support the use of the health data standards identified in the VA DoD Health Information Technical Standards Profile and by the VA DoD Interagency Clinical Informatics board, including following common data standards: National Information Exchange Model NIEM; Health Level 7 HL7; Logical Observation Identifiers, Names and Codes LOINC; Systematized Nomenclature of Medicine SNOMED; RxNorm, MedRT, ICD, CPT, HCPCS, Veteran Information Model VIM; and Healthcare Information Technology Standards Panel HITSP as well as VA/DOD/IPO extensions to these standards.</p> | <i>No change required.</i> |

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| RH6-11 | <p>It is difficult to discern an overall architecture for the desired system. I think there is a danger that Cerner will just add more unmaintainable code ("bolt-on functionality") to the existing spaghetti bowl to meet VA requirements, rather than creating a thoughtful new next-generation system. Would it be possible to add a diagram that would show a high level view of the future system with the relationship to external systems, etc.?</p> | <p>VA is committed to the acquisition of a commercial product - per the Secretary's testimony, VA does not want to be in the software development business. Therefore, VA does not want to dictate Cerner's future architecture, but rather rely on market forces to drive Cerner to create a competitive and efficient architecture.</p> | <p>No change required.</p> |
| RH6-12 | <p>I think several of the requirements listed in "003 – VA EHRM Non-Functional RTM (Amended 2.16.2018)" are unreasonable and/or infeasible.</p> | <p>All RTM requirements, both functional and non-functional have been negotiated with Cerner with the final language approved by both VA and Cerner.</p> | <p>No change required.</p> |

5.10.4 Seamless Interoperability / Joint Industry Outreach

The Contractor is required to collaborate with VA affiliates, community partners, EHR providers, healthcare providers, and vendors to advance seamless care throughout the health care provider market. Seamless care will require the creation of an integrated inpatient and outpatient solution with software components that have been designed, integrated, maintained, and deployed with a design architecture that allows for access to and sharing of common data and an enabling security framework that supports end-to-end healthcare related clinical and business operations. Seamless care is the experience patients and providers have moving from task to task and encounter to encounter within or between organizations such that high-quality decisions form easily and complete care plans execute smoothly. Information systems support the seamless-care experience by gathering data, interpreting data, presenting information, and managing tasks. Currently, industry lacks specific and uniform interoperability standards to support seamless care between organizations that employ different EHR systems. The Requirements Traceability Matrix Section D, Attachment 003, sets forth specific Informatics and Interoperability contract requirements. To accomplish this, the Contractor shall provide software and services to enable seamless care between VA encounters, encounters with other Government healthcare institutions, and outside entities through advancements in all areas of the EHR that occur. In addition, the software and services shall support the VA designated standards, such as SMART on FHIR and SMART-enabled applications, or other published standards.

The objective of these interoperability solutions is to advance the state of the art supporting seamless care for Veterans. Existing organizations promoting interoperability among EHR vendors, such as The Argonaut Project, have developed or are planning to develop technology standards or technical approaches that may support the EHRM seamless care strategy. To the extent that underlying third party technology is available or made available to meet the following timelines, the following interoperability software solutions and services shall be delivered under this section:

- a) By Initial Operating Capability (IOC), the Contractor shall provide a software solution enabling VA, DoD and community providers who have connected to the EHRM to share interactive care plans (ICPs) for Veterans. ICPs will enable collaborative communication between providers, and between providers and Veterans, in managing Veteran care.
- b) Within 24 months of applicable task order award, the Contractor shall provide a software solution enabling VA, DoD and connected community providers to complete referral management activities for Veterans.
- c) By IOC, the Contractor shall provide a software solution enabling VA to release and consume, via on-demand access, a Veteran's complete longitudinal health record to and from DoD and connected community partners, irrespective of which EHR they use, provided such EHR technology is certified by the Health and Human Services Office of the National Coordinator (ONC) or its successor. The longitudinal record solution shall support Provider-to-Provider record sharing, as well as Provider-Veteran-Provider sharing (Veteran mediated record sharing), including appropriate consent management. The bi-directional health information exchange shall maximize use of discrete data that supports context-driven clinical decisions and informatics.
- d) Within 24 months of applicable task order award, the Contractor shall provide a software solution enabling connected VA, DoD and community providers connected to the EHRM to send and receive Admission/Discharge/Transfer notifications "pushed" from the provider initiating a Veteran care event to enable proactive engagement by VA care coordinators when notified of a Veteran care event.
- e) Within 24 months of applicable task order award, the Contractor will demonstrate a solution for identification and management of Veterans at high risk of suicide, in collaboration with community partners.
- f) By IOC, the contractor shall provide URL based image access to the VA, community and academic partner systems who can support the URL and a viewer to the providers via the health information exchange networks. Within 36 months of applicable task order award, the Contractor shall provide a software solution enabling VA, DoD and community providers connected to the EHRM to have nationwide access to Veterans' imaging associated with diagnostic tests.
- g) By IOC, the Contractor shall provide a software solution for multilateral standards-based ingestion, normalization, storage, and exporting of Health Information Exchange acquired Veteran health information. The Contractor shall ensure that the solution provides a computable dataset for purposes of population health and research analytics, clinical decision support, and workflow integration.
- h) By IOC, the Contractor shall provide the capability to connect and exchange VA electronic health records via other interoperable networks, such as eHealth Exchange, CareQuality, CommonWell Health Alliance, DirectTrust, National Association for Trusted Exchange by supporting their specifications, security and content specifications. Contractor shall support network record locator services and patient provider associations as applicable in accordance with applicable technical standards and the Trusted Exchange Framework and Common Agreement (TEFCA).
- i) By IOC, the Contractor shall provide a capability for provider collaboration via secure e-mail using the ONC Direct protocol or future VA-designated standard within a Cerner Millennium EHR workflow context.
- j) Within 36 months of applicable task order award, the Contractor shall provide a solution for a Software Development Kit (SDK) enabling standards-based applications (e.g., SMART, FHIR, etc.) integrated with EHRM solutions and platforms.
- k) Cerner shall deliver annually an Interoperability Plan to the VA on how it intends to meet the objectives established in PWS section 5.10.4. The initial plan will be due within 3 months of applicable TO award.

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l) The Contractor shall conduct an annual Interoperability Self-Assessment against standards that shall be specified by VA, such as those promulgated by HIMSS or future standards to be identified by VA. The annual self assessment shall report on the state of each data element (e.g., which are supported in what capacities and in which formats). This will help assure standards implementation consistency and assure standards compliance with evolving national standards.

m) The Contractor shall support Knowledge Interoperability by supporting the extension of clinical content assets such as terminologies, clinical decision support rules, and order sets, etc., to the extent such extensions are consistent with the model and best practices of the controlling national standard. This includes the ability to curate, extend, and share that knowledge with clinical partners. This fosters rapid adoption from industry best practices, e.g., clinical professional societies.

5.10.4.1 Data Design and Information Sharing

In support of the interoperability objectives under this Section, agreed upon Contractor proprietary information/data model extension points (e.g., ingestion and record APIs) may be provided to both international and national standards designating organizations as described and set forth in an applicable Task Order. The Contractor shall provide VA access and usage rights into any underlying proprietary terminology/code systems for the purpose of enhancing national standards to address any gaps identified in the EHRM solution. The Contractor shall also make the interoperability capabilities and product enhancements developed under this contract available to non-VA Cerner clients.

5.10.4.2 VA Digital Health Platform/Digital Veterans Platform Integration

VA anticipates developing a Digital Health Platform/Digital Veterans Platform (DVP) to consolidate critical VA EHR and non-EHR operational systems. The Contractor shall integrate the EHRM to interoperate with DVP, or future state VA platform, including the DVP API gateway or any other method designated by VA.

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| Item # | Comment | Response | Modifications to RFP |
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| R#7-1 | Need a medical device registry | <p>VA-FR-05: Patient Tracking: Includes the ability to track medical devices and instruments</p> <p>VA-FR-10: Patient Treatment: Includes the use of medical devices while treating the patient, Vital Signs (VS) machines, Intravenous (IV) pumps, electronic patient education, unit tracking boards, bed management systems; physiological devices, sitter monitoring, remote telemetry.</p> <p>VA-FR-31: Manage Data: Includes capture of right data, right format, and right time for automated data collection from medical devices. a. Includes ordering and managing chemotherapy b. Includes the ability to manage data elements from various entry points (e.g., internal/external/medical devices/patient generated) as appropriate for continuity of care, workload capture,</p> <p>VA-FR40: Inventory Management/Supply chain operations: Includes the ability to assign medical devices from all medical specialties to an electronic health record</p> <p>VA-NF-T78: Critical Care: Includes Critical Care - automated workflows and documentation supporting critical care multi-disciplinary teams; Device Connectivity - automated collection of medical data from medical devices to ensure right data, right format, right time</p> <p>5.10.4 Seamless Interoperability / Joint Industry Outreach The Contractor is required to collaborate with VA affiliates, community partners, EHR providers, healthcare providers, and vendors to advance seamless care throughout the health care provider market. Seamless care will require the creation of an integrated inpatient and outpatient solution with software components that have been designed, integrated, maintained, and deployed with a design architecture that allows for access to and sharing of common data and an enabling security framework that supports end-to-end healthcare related clinical and business operations. Seamless care is the experience patients and providers have moving from task to task and encounter to encounter within or between organizations such that high-quality decisions form easily and complete care plans execute smoothly. Information systems support the seamless-care experience by gathering data, interpreting data, presenting information, and managing tasks. Currently, industry lacks specific and uniform interoperability standards to support seamless care between organizations that employ different EHR systems. The Requirements Traceability Matrix Section D, Attachment 003, sets forth specific Informatics and Interoperability contract requirements. To accomplish this, the Contractor shall provide software and services to enable seamless care between VA encounters, encounters with other Government healthcare institutions, and outside entities through advancements in all areas of the EHR that occur. In addition, the software and services shall support the VA designated standards, such as SMART on FHIR and SMART-enabled applications, or other published standards. The objective of these interoperability solutions is to advance the state of the art supporting seamless care for Veterans. Existing organizations promoting interoperability among EHR vendors, such as The Argonaut Project, have developed or are planning to develop technology standards or technical approaches that may support the EHRM seamless care strategy. To the extent that underlying third party technology is available or made available to meet the following timelines, the following interoperability software solutions and services shall be delivered under this section: a) By Initial Operating Capability (IOC), the Contractor shall provide a software solution enabling VA, DoD and community providers who have connected to the EHRM to share interactive care plans (ICPs) for Veterans. ICPs will enable collaborative communication between providers, and between providers and Veterans, in managing Veteran care. b) Within 24 months of applicable task order award, the Contractor shall provide a software solution enabling VA, DoD and connected community providers to complete referral management activities for Veterans. c) By IOC, the Contractor shall provide a software solution enabling VA to release and consume, via on-demand access, a Veteran’s complete longitudinal health record to and from DoD and connected community partners, irrespective of which EHR they use, provided such EHR technology is certified by the Health and Human Services Office of the National Coordinator (ONC) or its successor. The longitudinal record solution shall support Provider-to-Provider record sharing, as well as Provider-Veteran-Provider sharing (Veteran mediated record sharing), including appropriate consent management. The bi-directional health information exchange shall maximize use of discrete data that supports context-driven clinical decisions and informatics. d) Within 24 months of applicable task order award, the Contractor shall provide a software solution enabling connected VA, DoD and community providers connected to the EHRM to send and receive Admission/Discharge/Transfer notifications “pushed” from the provider initiating a Veteran care event to enable proactive engagement by VA care coordinators when notified of a Veteran care event. e) Within 24 months of applicable task order award, the Contractor will demonstrate a solution for identification and management of Veterans at high risk of suicide, in collaboration with community partners. f) By IOC, the contractor shall provide URL based image access to the VA, community and academic partner systems who can support the URL and a viewer to the providers via the health information exchange networks. 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l) The Contractor shall conduct an annual Interoperability Self-Assessment against standards that shall be specified by VA, such as those promulgated by HIMSS or future standards to be identified by VA. The annual self assessment shall report on the state of each data element (e.g., which are supported in what capacities and in which formats). This will help assure standards implementation consistency and assure standards compliance with evolving national standards.

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5.10.4.1 Data Design and Information Sharing

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| Item # | Comment | Response | Modifications to RFP |
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| R#8-1 | Need an interoperability sandbox/testbed | <p>5.10.4 Seamless Interoperability / Joint Industry Outreach The Contractor is required to collaborate with VA affiliates, community partners, EHR providers, healthcare providers, and vendors to advance seamless care throughout the health care provider market. Seamless care will require the creation of an integrated inpatient and outpatient solution with software components that have been designed, integrated, maintained, and deployed with a design architecture that allows for access to and sharing of common data and an enabling security framework that supports end-to-end healthcare related clinical and business operations. Seamless care is the experience patients and providers have moving from task to task and encounter to encounter within or between organizations such that high-quality decisions form easily and complete care plans execute smoothly. Information systems support the seamless-care experience by gathering data, interpreting data, presenting information, and managing tasks. Currently, industry lacks specific and uniform interoperability standards to support seamless care between organizations that employ different EHR systems. The Requirements Traceability Matrix Section D, Attachment 003, sets forth specific Informatics and Interoperability contract requirements. To accomplish this, the Contractor shall provide software and services to enable seamless care between VA encounters, encounters with other Government healthcare institutions, and outside entities through advancements in all areas of the EHR that occur. In addition, the software and services shall support the VA designated standards, such as SMART on FHIR and SMART-enabled applications, or other published standards.</p> <p>Note: Specifics on creation of an interoperability sandbox/testbed will be incorporated in the Technical Dependencies Task Order which is currently being drafted.</p> | <p><i>No change to RFP required.</i></p> <p><i>Will be included in Technical Dependencies Task Order</i></p> |

5.10.4 Seamless Interoperability / Joint Industry Outreach
 The Contractor is required to collaborate with VA affiliates, community partners, EHR providers, healthcare providers, and vendors to advance seamless care throughout the health care provider market. Seamless care will require the creation of an integrated inpatient and outpatient solution with software components that have been designed, integrated, maintained, and deployed with a design architecture that allows for access to and sharing of common data and an enabling security framework that supports end-to-end healthcare related clinical and business operations. Seamless care is the experience patients and providers have moving from task to task and encounter to encounter within or between organizations such that high-quality decisions form easily and complete care plans execute smoothly. Information systems support the seamless-care experience by gathering data, interpreting data, presenting information, and managing tasks. Currently, industry lacks specific and uniform interoperability standards to support seamless care between organizations that employ different EHR systems. The Requirements Traceability Matrix Section D, Attachment 003, sets forth specific Informatics and Interoperability contract requirements. To accomplish this, the Contractor shall provide software and services to enable seamless care between VA encounters, encounters with other Government healthcare institutions, and outside entities through advancements in all areas of the EHR that occur. In addition, the software and services shall support the VA designated standards, such as SMART on FHIR and SMART-enabled applications, or other published standards.

The objective of these interoperability solutions is to advance the state of the art supporting seamless care for Veterans. Existing organizations promoting interoperability among EHR vendors, such as The Argonaut Project, have developed or are planning to develop technology standards or technical approaches that may support the EHRM seamless care strategy. To the extent that underlying third party technology is available or made available to meet the following timelines, the following interoperability software solutions and services shall be delivered under this section:

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- d) Within 24 months of applicable task order award, the Contractor shall provide a software solution enabling connected VA, DoD and community providers connected to the EHRM to send and receive Admission/Discharge/Transfer notifications “pushed” from the provider initiating a Veteran care event to enable proactive engagement by VA care coordinators when notified of a Veteran care event.
- e) Within 24 months of applicable task order award, the Contractor will demonstrate a solution for identification and management of Veterans at high risk of suicide, in collaboration with community partners.
- f) By IOC, the contractor shall provide URL based image access to the VA, community and academic partner systems who can support the URL and a viewer to the providers via the health information exchange networks. Within 36 months of applicable task order award, the Contractor shall provide a software solution enabling VA, DoD and community providers connected to the EHRM to have nationwide access to Veterans’ imaging associated with diagnostic tests.

EHRM External RFP Review Matrix

- g) By IOC, the Contractor shall provide a software solution for multilateral standards-based ingestion, normalization, storage, and exporting of Health Information Exchange acquired Veteran health information. The Contractor shall ensure that the solution provides a computable dataset for purposes of population health and research analytics, clinical decision support, and workflow integration.
- h) By IOC, the Contractor shall provide the capability to connect and exchange VA electronic health records via other interoperable networks, such as eHealth Exchange, CareQuality, CommonWell Health Alliance, DirectTrust, National Association for Trusted Exchange by supporting their specifications, security and content specifications. Contractor shall support network record locator services and patient provider associations as applicable in accordance with applicable technical standards and the Trusted Exchange Framework and Common Agreement (TEFCA).
- i) By IOC, the Contractor shall provide a capability for provider collaboration via secure e-mail using the ONC Direct protocol or future VA-designated standard within a Cerner Millennium EHR workflow context.
- jj) Within 36 months of applicable task order award, the Contractor shall provide a solution for a Software Development Kit (SDK) enabling standards-based applications (e.g., SMART, FHIR, etc.) integrated with EHRM solutions and platforms.
- k) Cerner shall deliver annually an Interoperability Plan to the VA on how it intends to meet the objectives established in PWS section 5.10.4. The initial plan will be due within 3 months of applicable TO award.
- l) The Contractor shall conduct an annual Interoperability Self-Assessment against standards that shall be specified by VA, such as those promulgated by HIMSS or future standards to be identified by VA. The annual self assessment shall report on the state of each data element (e.g., which are supported in what capacities and in which formats). This will help assure standards implementation consistency and assure standards compliance with evolving national standards.
- m) The Contractor shall support Knowledge Interoperability by supporting the extension of clinical content assets such as terminologies, clinical decision support rules, and order sets, etc., to the extent such extensions are consistent with the model and best practices of the controlling national standard. This includes the ability to curate, extend, and share that knowledge with clinical partners. This fosters rapid adoption from industry best practices, e.g., clinical professional societies.

5.10.4.1 Data Design and Information Sharing

In support of the interoperability objectives under this Section, agreed upon Contractor proprietary information/data model extension points (e.g., ingestion and record APIs) may be provided to both international and national standards designating organizations as described and set forth in an applicable Task Order. The Contractor shall provide VA access and usage rights into any underlying proprietary terminology/code systems for the purpose of enhancing national standards to address any gaps identified in the EHRM solution. The Contractor shall also make the interoperability capabilities and product enhancements developed under this contract available to non-VA Cerner clients.

5.10.4.2 VA Digital Health Platform/Digital Veterans Platform Integration

VA anticipates developing a Digital Health Platform/Digital Veterans Platform (DVP) to consolidate critical VA EHR and non-EHR operational systems. The Contractor shall integrate the EHRM to interoperate with DVP, or future state VA platform, including the DVP API gateway or any other method designated by VA.

From: (b) (6)
Sent: 22 Jun 2018 11:15:46 -0500
To: Windom, John H.; Truex, Matthew (b) (6) (b) (6)
(b) (6) @bah.com)
Cc: Foster, Michele (SES)
Subject: RE: Looking for your guidance on FOIA Request

John,

Absolutely, we will ensure your recommendation is passed along to OGC.

Thanks in advance,

(b) (6)

(b) (6)
Director, Procurement Service C,
Department of Veterans Affairs
Office of Procurement, Acquisition, and Logistics
Technology Acquisition Center (TAC)
23 Christopher Way
Eatontown, New Jersey 07724
(b) (6)
e-mail: (b) (6) @va.gov

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From: Windom, John H.
Sent: Friday, June 22, 2018 11:58:34 AM
To: Truex, Matthew; (b) (6) (b) (6) (b) (6)
(b) (6) @bah.com)
Cc: (b) (6) Foster, Michele (SES)
Subject: RE: Looking for your guidance on FOIA Request

(b) (5)

(b) (5) This is why I recommend the involvement of the highest levels of VA leadership through the OGC channels.

Vr
John

Sent with Good (www.good.com)

From: Truex, Matthew

Sent: Friday, June 22, 2018 8:54:41 AM

To: Windom, John H.; (b) (6); (b) (6); (b) (6)
(b) (6)@bah.com)

Cc: (b) (6) Foster, Michele (SES)

Subject: RE: Looking for your guidance on FOIA Request

John – Understood. We will send the document as-is to the FOIA Office and copy our OGC procurement law group. The FOIA Office will coordinate with the OGC Information Law Group as well.

Thanks,
Matt

Matthew Truex
Contracting Officer
Department of Veterans Affairs
Office of Procurement, Acquisition and Logistics
Technology Acquisition Center
23 Christopher Way
Eatontown, New Jersey 07724
Office: (b) (6)
Mobile: (b) (6)
e-mail: (b) (6)@va.gov



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From: Windom, John H.
Sent: Friday, June 22, 2018 8:47 AM
To: (b) (6); (b) (6); (b) (6)
(b) (6)@bah.com)
Cc: Truex, Matthew
Subject: RE: Looking for your guidance on FOIA Request

What does OGC say? (b) (5)

(b) (5) The info is what it is? Not my call. There involvement was fostered by the former Secretary not us. We are clean and have written a contract to reflect the requirements of the VA.

Vr
John

Sent with Good (www.good.com)

From: (b) (6)
Sent: Friday, June 22, 2018 5:30:06 AM
To: (b) (6); (b) (6)@bah.com)
Cc: Truex, Matthew; Windom, John H.
Subject: FW: Looking for your guidance on FOIA Request

(b) (6) (b) (6) – We are looking for John’s/PEO official guidance on the FOIA request concerning comments from Bruce Moskowitz etc. See details below and attached.

Thanks in advance!

(b) (6)

From: (b) (6)
Sent: Thursday, June 21, 2018 9:49 AM
To: Windom, John H.
Cc: Truex, Matthew
Subject: Looking for your guidance on FOIA Request

John – We have the matrix of external review comments that was specified in the FOIA request and have redacted the specific reviewer names. The spreadsheet includes comments from *all* external reviewers accumulated through a series of calls and emails and may exceed the FOIA ask which was: “copies of a spreadsheet prepared by John Windom’s staff since Feb. 1, 2018, showing all the comments made on a conference call with David Shulkin, Scott Blackburn, Marc Sherman and Bruce Moskowitz. The spreadsheet showed how the comments had been addressed and what actions needed to be taken” Any of the many external comments can be spun into a story if that is the intent of the FOIA ask. Should we limit our response to only those comments recorded from Marc Sherman and Bruce Moskowitz? Or is that reading this too literally? The redacted spreadsheet is attached. Note that reviewer 5 is Marc Sherman – speaking on behalf of himself and Bruce Moskowitz.

Thanks for your guidance on this!

(b) (6)

(b) (6)

Computer Engineer
Office of Acquisition Operations
Technology Acquisition Center
Department of Veterans Affairs
23 Christopher Way
Eatontown, New Jersey 07724

(b) (6)

(b) (6)@va.gov

18-08443-F

Isaac Arnsdorf
Journalist
ProPublica
2620 13th St NW
C101
Washington, DC 20009

(b) (6)

RECEIVED DATE
CONTROL #
VHA FOIA OFFICE

05 Jun 2018
18-08443-F

June 01, 2018

FOIA Officer
Department of Veterans Affairs:
Central Office
810 Vermont Avenue, NW
Department of Veterans Affairs, (005R1C)
Washington, DC 20420
(b) (6)
vacofoiservice@va.gov

FOIA REQUEST

Fee waiver requested

Dear FOIA Officer:

Pursuant to the federal Freedom of Information Act, 5 U.S.C. § 552, I request access to and copies of a spreadsheet prepared by John Windom's staff since Feb. 1, 2018, showing all the comments made on a conference call with David Shulkin, Scott Blackburn, Marc Sherman and Bruce Moskowitz. The spreadsheet showed how the comments had been addressed and what actions needed to be taken.

I would like to receive the information in its original electronic format.

I agree to pay reasonable duplication fees for the processing of this request in an amount not to exceed \$250. However, please notify me prior to your incurring any expenses in excess of that amount.

Please waive any applicable fees. Release of the information is in the public interest because it will contribute significantly to public understanding of government operations and activities. I am a journalist primarily engaged in the dissemination of information.

If my request is denied in whole or part, I ask that you justify all deletions by reference to specific exemptions of the act. I will also expect you to release all segregable portions of otherwise exempt material. I, of course, reserve the right to appeal your decision to withhold any information or to deny a waiver of fees.

I would appreciate your communicating with me by email or telephone, rather than by mail.

I look forward to your determination regarding my request within 20 business days, as the statute requires.

Thank you for your assistance.

Sincerely,

Isaac Arnsdorf

RECEIVED
JUN 04 2018
BY: FOIA SERVICE

18-08443-F

VACO FOIA Service Inbox

From: Isaac Arnsdorf via iFOIA.org <iarnsdorf.127203@mail.ifoia.org>
Sent: Friday, June 01, 2018 5:05 PM
To: VACO FOIA Service Inbox
Subject: [EXTERNAL] Public Records Request
Attachments: Windom spreadsheet.pdf

Reply ABOVE THIS LINE

Dear FOIA Officer:

Attached is a formal request for public records. Please feel free to contact me at this email address or at 203-464-1409 with any questions.

Thank you for your assistance.

Sincerely,

Isaac Arnsdorf

This message was sent via iFOIA.org. If you have questions about iFOIA, please refer to the [About page](#) or email ifoia-help@rcfp.org.

This message was sent via [iFOIA.org](#).

RECEIVED
JUN 04 2018
BY: FOIA SERVICE

From: Truex, Matthew
Sent: 19 Jun 2018 08:48:06 -0500
To: Windom, John H.; Foster, Michele (SES); (b) (6); (b) (6)
(b) (6); (b) (6)
Cc: Sandoval, Camilo J.; Morris, Genevieve (OS/ONC/IO)
(b) (6)@hhs.gov; Zenooz, Ashwini; Short, John (VACO); (b) (6)
Subject: RE: Update_Important Request
Attachments: External Reviewers.xlsx

John – Updated to include organization/affiliation.

Thanks,
Matt

Matthew Truex
Contracting Officer
Department of Veterans Affairs
Office of Procurement, Acquisition and Logistics
Technology Acquisition Center
23 Christopher Way
Eatontown, New Jersey 07724
Office: (b) (6)
Mobile: (b) (6)
e-mail: (b) (6)@va.gov



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From: Windom, John H.
Sent: Monday, June 18, 2018 5:00 PM
To: Truex, Matthew; Foster, Michele (SES); (b) (6); (b) (6)
Cc: Sandoval, Camilo J.; Morris, Genevieve (OS/ONC/IO); (b) (6)@hhs.gov; Zenooz, Ashwini; Short, John (VACO); (b) (6)
Subject: RE: Update_Important Request

Matt,
Please add their organization for clarity.
Vr
John

John H. Windom, Senior Executive Service (SES)

Program Executive for Electronic Health Record Modernization (PEO EHRM)

811 Vermont Avenue NW (b) (6)

Washington, DC 20420

(b) (6) @va.gov

Office (b) (6)

Mobile (b) (6)

Executive Assistant: (b) (6) – Appointments and Scheduling

(b) (6) @va.gov Office: (b) (6)

From: Truex, Matthew

Sent: Monday, June 18, 2018 4:07 PM

To: Windom, John H.; Foster, Michele (SES) (b) (6) (b) (6) (b) (6)

Cc: Sandoval, Camilo J.; Morris, Genevieve (OS/ONC/IO) (Genevieve.Morris@hhs.gov); Zenooz, Ashwini; Short, John (VACO); (b) (6)

Subject: RE: Update_Important Request

John,

As requested, provided is a listing of non-VA employees (at that time) who were involved in the various external reviews during the EHRM acquisition phase. Listing was generated based on the numerous MITRE led reviews and White House review(s).

Thanks,
Matt

Matthew Truex
Contracting Officer
Department of Veterans Affairs
Office of Procurement, Acquisition and Logistics
Technology Acquisition Center
23 Christopher Way
Eatontown, New Jersey 07724
Office: (b) (6)
Mobile: (b) (6)
e-mail: (b) (6) @va.gov



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prohibited. If you have received this e-mail in error, please notify me via return e-mail or telephone (b) (6) and permanently delete the original and any copy of any e-mail and any printout thereof."

From: Windom, John H.

Sent: Saturday, June 16, 2018 1:43 AM

To: Truex, Matthew; Foster, Michele (SES); (b) (6); (b) (6) (b) (6)

Cc: Sandoval, Camilo J.; Morris, Genevieve (OS/ONC/IO) (Genevieve.Morris@hhs.gov); Zenooz, Ashwini; Short, John (VACO); (b) (6)

Subject: Update_Important Request

Michele and TAC Team:

This request comes directly from the Acting Secretary in support of hearing preps. Please provide a list of names of the non-VA employees (supporting various external reviews) that have signed NDAs to review our EHRM acquisition/program documents in advance of contract award (May 17 2018).

Thank you,

John

John H. Windom, Senior Executive Service (SES)

Program Executive for Electronic Health Record Modernization (PEO EHRM)

811 Vermont Avenue NW (b) (6)

Washington, DC 20420

(b) (6) @va.gov

Office: (b) (6)

Mobile: (b) (6)

Executive Assistant: (b) (6) - Appointments and Scheduling

(b) (6) @va.gov Office: (b) (6)

| LAST | FIRST | <u>Organization/Affiliation</u> |
|------------|-----------|--|
| (b) (6) | | US Army/DHA CareJourney Indiana Health Information Exchange Mitre Mitre The Mayo Clinic Mitre Mayo Clinic Geisinger Kaiser Permanente Ascension Health Kaiser Permanente Mitre Lahey Health Leavitt Partners, LLC DHA/DHMS Intermountain Healthcare US Navy/SPAWAR Massachusetts General Hospital Mitre Collective Medical Technologies, Inc. University of California, Los Angeles/American College of Surgeons Harvard Medical School/Boston's Children Hospital Sutter Health Massachusetts General Hospital/Partners Healthcare System Office of the National Coordinator for Health Information Technology (ONC) |
| Morris | Genevieve | |
| Moskowitz | Bruce | Internist/External Expert Participant |
| (b) (6) | | Universal Health Services American College of Surgeons University of Washington Medical Center |
| Perlmutter | Ike | CEO Marvel Entertainment |
| (b) (6) | | Intermountain Healthcare Johns Hopkins University Mitre Mitre Johns Hopkins University The Mayo Clinic Mitre Mitre Mitre |
| Sherman | Marc | Alvarez & Marsal |
| (b) (6) | | University of Pittsburgh Medical Center The Healthcare Information and Management Systems Society US Air Force University of Washington Mitre Mitre Mitre HealthSouth |

From: Sandoval, Camilo J.
Sent: 31 May 2018 12:00:00 -0500
To: (b) (6) Fleck, Robert R. (OGC)
Cc: Ulliyot, John;Hutton, James;Windom, John H.;Morris, Genevieve (OS/ONC/IO);Truex, Matthew (b) (6)
Subject: RE: [EXTERNAL] MITRE report on EHR
Attachments: VA EHRM Interoperability Review Report Jan 2018 FINAL.PDF, VA EHRM Interoperability Review Report Executive Summary Jan 2018 FINAL.PDF

attached

Camilo Sandoval
(b) (6)

From: (b) (6)
Sent: Thursday, May 31, 2018 12:37 PM
To: Fleck, Robert R. (OGC); Sandoval, Camilo J.
Cc: Ulliyot, John; Hutton, James; Windom, John H.; Morris, Genevieve (OS/ONC/IO); Truex, Matthew; (b) (6)
Subject: RE: [EXTERNAL] MITRE report on EHR

Can someone share the reports with me and I will work with OGC to see if they are releasable?

Thanks,

(b) (6)
Press Secretary
Department of Veterans Affairs
(b) (6)
(b) (6) @va.gov
(b) (6)

From: Fleck, Robert R. (OGC)
Sent: Thursday, May 31, 2018 12:27 PM
To: (b) (6) @va.gov>; Sandoval, Camilo J. (b) (6) @va.gov>
Cc: Ulliyot, John <(b) (6) @va.gov>; Hutton, James <(b) (6) @va.gov>; Windom, John H. (b) (6) @va.gov>; Morris, Genevieve (OS/ONC/IO) <(b) (6) @hhs.gov>; Truex, Matthew (b) (6) @va.gov>; (b) (6) @va.gov>
Subject: RE: [EXTERNAL] MITRE report on EHR

Most likely the last two.

Bob
Robert R. Fleck
Chief Counsel, Procurement Law Group
Office of the General Counsel
(b) (6)

810 Vermont Avenue, NW
Washington, DC 20420
Office (b) (6)

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From: (b) (6)
Sent: Thursday, May 31, 2018 12:22 PM
To: Fleck, Robert R. (OGC); Sandoval, Camilo J.
Cc: Ulliyot, John; Hutton, James; Windom, John H.; Morris, Genevieve (OS/ONC/IO); Truex, Matthew; (b) (6)
Subject: RE: [EXTERNAL] MITRE report on EHR

What is the main report that the public is aware of?

(b) (6)
Press Secretary
Department of Veterans Affairs
(b) (6)
(b) (6)@va.gov
(b) (6)

From: Fleck, Robert R. (OGC)
Sent: Thursday, May 31, 2018 12:12 PM
To: Sandoval, Camilo J. <(b) (6)@va.gov>
Cc: Ulliyot, John <(b) (6)@va.gov>; Hutton, James <(b) (6)@va.gov>; Windom, John H. <(b) (6)@va.gov>; Morris, Genevieve (OS/ONC/IO) <(b) (6)@hhs.gov>; (b) (6) <(b) (6)@va.gov>; Truex, Matthew <(b) (6)@va.gov>; (b) (6) <(b) (6)@va.gov>
Subject: RE: [EXTERNAL] MITRE report on EHR

Mr. Sandoval,

There are several MITRE reports prepared for the EHR acquisition. The reports are:

Red Team Review (VA EHRM Listening Forum): Best Practice Insights - September 7, 2017

Blue Team Review: Independent Assessment – September 29, 2017

MITRE Interoperability Review and Report - February 1, 2018

Interoperability Review Report –MITRE/law firm report

The MITRE Interoperability Review and Report - February 1, 2018, was requested by a private equities firm on February 28, 2018. The report has not been released and is currently in the queue for FOIA review.

Once we understand which report(s) the reporter has requested, the request for the report(s) could be treated as a FOIA request. An answer to a FOIA request would take some time. If we would like to provide the report(s) more responsively, the report(s) could be reviewed in accordance with FOIA principles, i.e., redacted for proprietary material, personally identifiable information and other protected information, and then released. However, a rationale supporting a different process for the prior request now in the queue would be needed..

As you may be aware, CliniComp currently has an appeal to the Federal Circuit on a ruling by the Court of Federal Claims denying a protest of the award to Cerner. As a result, In addition to the FOIA analysis, any release will need to be coordinated with DOJ.

Bob
Robert R. Fleck
Chief Counsel, Procurement Law Group
Office of the General Counsel
Room (b) (6)
810 Vermont Avenue, NW
Washington, DC, 20420
Office (b) (6)

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From: Sandoval, Camilo J.
Sent: Thursday, May 31, 2018 10:14 AM
To: (b) (6) Fleck, Robert R. (OGC)
Cc: Ulyot, John; Hutton, James; Windom, John H.; Morris, Genevieve (OS/ONC/IO)
Subject: RE: [EXTERNAL] MITRE report on EHR

Bob,

Is the Mitre report still considered classified at this point in time? A reporter from the Wall Street Journal is inquiring below.

Thank you,
Camilo

From: (b) (6)
Sent: Thursday, May 31, 2018 6:10:42 AM
To: Sandoval, Camilo J.
Cc: Ulyot, John; Hutton, James
Subject: RE: [EXTERNAL] MITRE report on EHR

Do you have time to discuss the below this morning?

(b) (6)
Press Secretary
Department of Veterans Affairs
(b) (6)
(b) (6) @va.gov

(b) (6)

From: Benjamin Kesling [mailto:(b) (6)@wsj.com]
Sent: Thursday, May 31, 2018 7:32 AM
To: (b) (6)@va.gov>
Subject: Re: [EXTERNAL] MITRE report on EHR

The decision was made weeks ago, but it will have enduring effects and I am trying to piece together what those will be and what went into the thought process. This seems to be a report that has a repository of relevant data and since a decision has been made, ought to be publicly available by this time. I'd also very much like to speak with the top information officer at VA about the way forward with the Cerner contract and open-architecture issues.

Thanks very much
Ben

Ben Kesling

Staff Reporter

The Wall Street Journal

(b) (6)
Iraq mobile (b) (6)

@bkesling

On May 30, 2018, at 14:47 (b) (6)@va.gov> wrote:

Thanks, Ben. That decision was made weeks ago. Can you walk me through the angle your piece a bit?

(b) (6)

Press Secretary
Department of Veterans Affairs

(b) (6)

(b) (6) @va.gov

(b) (6)

From: Ben Kesling [mailto:(b) (6)@wsj.com]

Sent: Tuesday, May 29, 2018 5:34 PM

To: (b) (6) (b) (6)@va.gov>

Subject: Re: [EXTERNAL] MITRE report on EHR

I'm writing about the EHR decision and would like to have the report that helped inform the decision. I'm putting together something initially by the end of the week. If the report is not going to be widely distributed or available it could affect timeline.

Thanks,
Ben

On Tue, May 29, 2018 at 5:05 PM, Cashour, Curtis <(b) (6)@va.gov> wrote:

I will check. What is the specific angle of your story and deadline?

Thanks,

(b) (6)

Press Secretary
Department of Veterans Affairs

(b) (6)

(b) (6) @va.gov

(b) (6)

From: Ben Kesling [mailto:(b) (6)@wsj.com]

Sent: Tuesday, May 29, 2018 4:44 PM

To: (b) (6)@va.gov>

Subject: [EXTERNAL] MITRE report on EHR

(b) (6)

Could I get a copy of the Mitre report on EHR implementation from earlier this year and which I don't think has been publicly released?

Thank you,
Ben

--

Ben Kesling

Staff Reporter
The Wall Street Journal

(b) (6)

Iraq mobile (b) (6)
@bkesling

--

Ben Kesling
Staff Reporter
The Wall Street Journal

(b) (6)

Iraq mobile (b) (6)
@bkesling

From: (b) (6)
Sent: 16 May 2018 10:51:19 -0400
To: Zenooz, Ashwini
Subject: [EXTERNAL] Letter
Attachments: 2018.05.03 EHR Modernization Letter.docx

May XX, 2018

The Honorable Thomas Bowman
Deputy Secretary
U.S. Department of Veterans Affairs
810 Vermont Avenue, NW
Washington, D.C. 20420

Dear Deputy Secretary Bowman:

We are deeply concerned by the malign neglect within the Department of Veterans Affairs' (VA) efforts to achieve electronic health record (EHR) modernization. This is evident through the failure to obtain qualified leadership for the Office of Information Technology (OIT), reports of political interference hindering EHR implementation, as well as the rampant vacancies for positions that ensure proper oversight of a new EHR system. We ask that you act to swiftly resolve our concerns and ensure an interoperable VA EHR system with the Department of Defense expeditiously comes to fruition.

As you are aware, OIT is responsible for carrying out the VA's multibillion dollar overhaul of its outdated EHR system which will improve care for veterans by ensuring interoperability with the Department of Defense and private sector. We are troubled to learn of the temporary appointment of Mr. Camilo Sandoval – a former Trump campaign crony – to serve as Chief Information Officer (CIO). This appointment raises serious data security concerns stemming from Mr. Sandoval's previous position as the Director of Data Operations in 2016 while the Trump campaign was contracting with Cambridge Analytica. Cambridge Analytica's misuse of personal information from tens of millions of Americans, including veterans, was an incredible breach of trust. As such, Mr. Sandoval's role in these activities must be thoroughly examined and he should be put nowhere near veterans' health and benefits data.

Furthermore, there are serious character concerns that should disqualify Mr. Sandoval for this position. According to recent reports, Mr. Sandoval is the subject of a \$25 million lawsuit charging that he "slandered, harassed and sexually discriminated against [a campaign colleague] in violation of New York City's human rights laws." Likewise, his previous conflicts while working at the Department of Treasury and Veterans Health Administration raise serious red flags and indicate a history of rampant interpersonal conflicts with co-workers. Mr. Sandoval should be removed from his temporary position as CIO and replaced with a first class leader who is capable of implementing the VA's EHR modernization and fulfilling the VA's obligation to our nation's heroes.

In addition to VA's inability to secure a qualified, capable professional to spearhead EHR modernization, we are aware that members of the President's inner circle are inappropriately delaying the contract to begin EHR modernization with the VA. This \$16 billion contract requires input from specialized professionals who fully understand the intricacies that go into transforming the VA's medical record system. Reports that the President is taking advice from his personal friend and member of his Mar-a-Lago circle, Dr. Bruce Moskowitz, to delay this previously announced contract are alarming. As an internist with no government experience, Dr. Moskowitz simply does not have the expertise to provide the Administration with reputable insight. As such, we ask that you provide an update on the status of this contract, including information on all collaborations with Dr. Moskowitz or any other individual who has provided input to this contract outside of VA.

The VA has 33,000 vacancies agency wide, including 553 within OIT. In the last four months alone, nearly 40 senior staffers have resigned, effectively stalling operations in essential areas such as information technology. As such, we urge you to take immediate action to implement a specific initiative

to rapidly hire the expertise necessary to address the VA's pervasive vacancies. In order to provide world-class service to our veterans, the VA must be fully staffed with driven, capable leaders. Current VA employees, who are dedicated to serving and honoring our veterans, are forced to shoulder the work of former-colleagues – contributing the low morale among the VA workforce. The historic overhaul of the VA's outdated health record system requires adequate staffing levels to ensure this project succeeds. Anything less than a robust workforce is a disservice to veterans, VA employees, and tax payers.

The need for VA's EHR modernization cannot be overstated. We ask that you take meaningful action to ensure transparency and accountability as VA seeks to establish a new EHR system. We look forward to hearing from you.

Sincerely,

RICHARD BLUMENTHAL
United States Senate

X
United States Senate

From: (b) (6)
Sent: 14 May 2018 15:25:55 -0700
To: Windom, John H.
Cc: Rychalski, Jon J.
Subject: RE: Talking Points for EHRM Signing Day

Did the DEPSEC concur on the disbursement of funds? Thanks!

Sent with Good (www.good.com)

From: Windom, John H.
Sent: Monday, May 14, 2018 3:10:29 PM
To: (b) (6); (b) (6); (b) (6); Hutton, James; (b) (6)
Ullyot, John; (b) (6); (b) (6); O'Rourke, Peter M.; (b) (6)
Rychalski, Jon J.; (b) (6); (b) (6); (b) (6); (b) (6)
(b) (6); Sandoval, Camilo J.; Zenooz, Ashwini
Cc: (b) (6)@who.eop.gov; (b) (6)
(b) (6)@who.eop.gov; (b) (6); (b) (6)@who.eop.gov
Subject: RE: Talking Points for EHRM Signing Day

Concur Sir. Thank you for the reaffirmation.

Vr
John

John H. Windom, Senior Executive Service (SES)
Program Executive for Electronic Health Record Modernization (PEO EHRM)
811 Vermont Avenue NW (b) (6)
Washington, DC 20420
(b) (6)@va.gov
Office: (b) (6)
Mobile: (b) (6)
Executive Assistant: (b) (6) - Appointments and Scheduling
(b) (6)@va.gov Office: (b) (6)

From: (b) (6)
Sent: Monday, May 14, 2018 5:09 PM
To: (b) (6); (b) (6); Hutton, James; (b) (6); Ullyot, John;
(b) (6); Windom, John H.; (b) (6); O'Rourke, Peter M.; (b) (6)
Rychalski, Jon J.; (b) (6); (b) (6); (b) (6); (b) (6)
(b) (6); (b) (6); Sandoval, Camilo J.; Zenooz, Ashwini

Cc: (b) (6) @who.eop.gov; (b) (6) (b) (6) @who.eop.gov; (b) (6) (b) (6) (b) (6) @who.eop.gov

Subject: RE: Talking Points for EHRM Signing Day

No. DoD should be the only agency responding to questions about the Genesis report/Politico article. If the Hill staff are asking questions on the Genesis report/Politico article, they should be referred to DoD.

Here is VA's only statement on electronic health records modernization:

Finalizing a decision on the Department's electronic health record modernization (EHRM) effort is one of Acting Secretary Wilkie's top three short-term priorities for VA, given the importance, magnitude and financial investment that this decision represents for Veterans and the department.

While VA doesn't typically comment on ongoing contract negotiations, proper due diligence is required to ensure the best interests of Veterans and taxpayers are served before the department enters into any agreement of this size and importance. We are doing that now, and expect to make a final decision and corresponding announcement on EHRM by Memorial Day.

(b) (6)
Press Secretary
Department of Veterans Affairs
(b) (6)
(b) (6) @va.gov
(b) (6)

From: (b) (6)
Sent: Monday, May 14, 2018 5:00 PM
To: (b) (6) @va.gov; Hutton, James (b) (6) @va.gov; (b) (6) @va.gov; Ulyot, John (b) (6) @va.gov; (b) (6) @va.gov; Windom, John H. (b) (6) @va.gov; (b) (6) @va.gov; (b) (6) @va.gov; O'Rourke, Peter M. (b) (6) @va.gov; (b) (6) @va.gov; Rychalski, Jon J. (b) (6) @va.gov; Sandoval, Camilo J. (b) (6) @va.gov; Zenooz, Ashwini (b) (6) @va.gov
Cc: (b) (6) @who.eop.gov (b) (6) @who.eop.gov; (b) (6) @who.eop.gov (b) (6) @who.eop.gov; (b) (6) @who.eop.gov; (b) (6) @who.eop.gov; (b) (6) @who.eop.gov

Subject: RE: Talking Points for EHRM Signing Day

James and team: are these Q&As cleared to share with the hill in response to questions about the *Politico* article. Our appropriations committees are requesting any information available to refute the claims made in the article.

Thanks,

(b) (6)

From: (b) (6)
Sent: Monday, May 14, 2018 12:05 PM
To: Hutton, James; (b) (6) Ulyot, John; (b) (6) Windom, John H.; (b) (6)
(b) (6) (b) (6) O'Rourke, Peter M.; (b) (6) Rychalski, Jon J.; (b) (6)
(b) (6) (b) (6) (b) (6) (b) (6) (b) (6)
(b) (6) Sandoval, Camilo J.; Zenooz, Ashwini
Cc: (b) (6) @who.eop.gov); (b) (6)
(b) (6) @who.eop.gov); (b) (6) (b) (6)
(b) (6) @who.eop.gov)
Subject: RE: Talking Points for EHRM Signing Day

Mr. Hutton – The below are recommended VA Q&As regarding the *Politico* article. For specific DoD or White House questions, we defer to the DoD and/or WH press office.

Please let us know if you have any additional questions,

(b) (6)

Q1. The report says there are two indications that MHS GENESIS “may not be scalable”, is this a concern for VA?

A1. Ensuring seamless care for Servicemembers and Veterans is a central goal for the EHR effort. In early 2017, Cerner rigorously tested the scalability of Cerner Millennium to ensure a single VA, DoD and US Coast Guard domain could be maintained, using real-world similar conditions representing up to 100,000 concurrent users. There was no issue with the volume of transactions the system could process during this test, and there was around 40% remaining processor overhead available.

Q2. How has VA incorporated DoD’s lessons learned in VA’s deployment plans?

A2. VA and DoD are working closely together to ensure lessons learned at DoD sites will enhance future deployments at DoD as well as VA. DoD’s biggest challenges have centered on Change Management and User Adoption processes. VA appreciates the candid feedback received from DoD and have incorporated many lessons learned into our planned deployment approach with a greater emphasis on training and user adoption.

Q3. Does VA have any concerns that this report will affect your ongoing negotiations with Cerner?

A3. During contract negotiations, Cerner has been transparent and working closely with VA about the challenges outlined in this report. By learning from DoD, VA will be able to proactively address these challenges to further reduce potential risks at VA’s first deployment sites.

(b) (6)

PMO Support

EHRM PEO

(b) (6) Mobile)

From: Hutton, James

Sent: Monday, May 14, 2018 9:54 AM

To: (b) (6) @va.gov>; Ulyot, John <(b) (6) @va.gov>; (b) (6) @va.gov>; (b) (6) @va.gov>; Windom, John H. <(b) (6) @va.gov>; (b) (6) @va.gov>; Cashour, Curtis <(b) (6) @va.gov>; O'Rourke, Peter M. <(b) (6) @va.gov>; (b) (6) @va.gov>; Rychalski, Jon J. <(b) (6) @va.gov>; (b) (6) @va.gov>

Cc: (b) (6) @who.eop.gov <(b) (6) @who.eop.gov>; (b) (6) @who.eop.gov <(b) (6) @who.eop.gov>; (b) (6) @who.eop.gov <(b) (6) @who.eop.gov>; (b) (6) @who.eop.gov <(b) (6) @who.eop.gov>

Subject: RE: Talking Points for EHRM Signing Day

(b) (6)

Please develop a questions/answers based on the points raised in the article below. This is certain to be a focus of reporters in upcoming media engagements by the acting Secretary (and others).

Will the points raised in the article have an impact on our decision/implementation?

<https://www.politico.com/story/2018/05/11/kushner-backed-health-care-project-gets-devastating-review-535847?cid=apn>

Kushner-backed health care project gets ‘devastating’ review

The Pentagon report could delay the VA’s plans to install the multibillion-dollar software project begun under Obama.

ARTHUR ALLEN 05/11/2018 04:54 PM EDT

The first stage of a multibillion-dollar military-VA digital health program championed by Jared Kushner has been riddled with problems so severe they could have led to patient deaths, according to a report obtained by POLITICO.

The April 30 [report](#) expands upon the findings of a March [POLITICO story](#) in which doctors and IT specialists expressed alarm about the software system, describing how clinicians at one of four pilot centers, Naval Station Bremerton, quit because they were terrified they might hurt patients, or even kill them.

Experts who saw the Pentagon evaluation — it lists 156 “critical” or “severe” incident reports with the potential to result in patient deaths — characterized it as “devastating.”

“Traditionally, if you have more than five [incident reports] at that high a level, the program has significant issues,” a member of the testing team told POLITICO.

The project’s price tag and political sensitivity — it was designed to address nagging problems with military and veteran health care at a cost of about \$20 billion over the next decade — means it is “just another ‘too big to fail’ program,” the tester said. “The end result everyone is familiar with — years and years of delays and many billions spent trying to fix the mess.”

The [unclassified findings](#) could further delay a related VA contract with Cerner Corp., the digital health records company that began installing the military’s system in February 2017. The VA last year chose Cerner as its vendor, with the belief that sharing the same system would facilitate the exchange of health records when troops left the service. The military program, called MHS Genesis, was approved in 2015 under President Barack Obama.

In a briefing with reporters late Friday, Pentagon officials said they had made many improvements to the pilot at four bases in the Pacific Northwest since the study team ended its review in November.

“MHS Genesis is extremely important and it is important to get MHS Genesis right,” said Vice Adm. Raquel Bono, chief of the Defense Health Agency. “Feedback from the test community and dedicated professionals at the sites has been invaluable.”

A White House spokesman noted Friday afternoon that [Kushner](#) had no involvement with DOD’s contract with Cerner. He did advise VA officials last year to contract with Cerner because the military was already using the vendor, and he argued the creation of a seamless, unified system would allow records to be shared between military and VA treatment centers.

“He still believes that the decision to move the VA to Cerner was the right one,” the spokesman said, but noted that Kushner has advocated for “moving slowly, methodically and properly” with the VA contract to avoid the problems experienced by the military hospitals.

POLITICO reported last month that the VA contract has been delayed by [concerns expressed](#) by close friends of the president, including Marvel Entertainment chairman Ike Perlmutter, who has advised the president on veterans’ issues, and West Palm Beach doctor Dr. Bruce Moskowitz, who got White House approval to participate in the discussions.

VA officials on Wednesday said they will decide whether to go ahead with their deal by Memorial Day. To date, indications are they plan to sign it.

Doctors and IT specialists working at the pilot sites break into two groups, according to another well-placed source: those who think there is a path to make the system work — although it will take at least a year — and those who think there is no hope for it.

Two Cerner employees who spoke to POLITICO said the Pentagon and the lead partner on the military contract, Leidos Health, were to blame for many of the early problems. Cerner, not Leidos, would be the lead contractor for the VA contract.

The Pentagon report concluded that the new software system, called MHS Genesis, is “neither operationally effective, nor operationally suitable” -- and recommended freezing the rollout indefinitely until it can be fixed.

In another alarming finding, it disclosed “two indications that MHS Genesis may not be scalable,” meaning it may be impossible to build it out through the entire military health system, which encompasses 650 hospitals and clinics serving 9.6 million troops and their beneficiaries around the world.

Testers noticed that each time a new hospital went live, the earlier sites suffered software slowdowns.

In addition, the “drop-down” selection lists in the computer program contained options from all four treatment facilities where it was rolled out. For example, users need to search through a list of every provider in the entire system to schedule a patient appointment. “Without narrowing the lists or providing a standardized structure, these lists will become unmanageable as more sites use MHS Genesis,” the report says.

Doctors and IT officials involved in the project complained to POLITICO of dangerous errors and a reduction in the number of patients they can treat because of the clumsy system. Four physicians at Naval Station Bremerton, in the Puget Sound, the first hospital to go online, described a stressful atmosphere in which prescription requests came out wrong at the pharmacy, referrals failed to go through to specialists, and tasks as basic as requesting lab work were impossible.

The Pentagon evaluation, mostly done last fall, went so badly that the testing team stopped after visiting three of the four sites so the military could fix the problems, the report says. The fourth and largest site, at Madigan Army Medical Center near Tacoma, Wash., was to be examined later this year.

Officials from Cerner and Leidos Health on Friday's call dismissed suggestions that the project could not work on a military-wide scale. They said the implementation problems were nothing they had not encountered in major commercial IT projects, and that they were being fixed. They and defense officials said the rollout is still on track to be finished in 2022.

As evidence that conditions have improved since the inspection report, patient visits increased by 20 percent from November to March, and 78 percent more prescriptions were filled on an average day, said Col. Michael Place, commander of Madigan Army Medical Center, the largest of the four installations.

"As [an initial MHS Genesis site], one of our roles is to find all those things that need to be fixed," Place said. "We take perverse pride in reporting all those things."

But former VA and military IT officials, and two investigators who saw the report, were skeptical.

"The language they use in this report is blunt," said a source with experience examining military contracts. "And I think it was written with the purpose of being damning -- to convey the extent of the problems and to caution about moving forward."

"You'll continue to hear that they just made significant updates to the system, and that no one is saying to pull the plug on the program," said the tester, who said he would be fired if his identity were released. "If DoD members, including all the healthcare professionals at those sites were actually able to freely speak, you would hear most of them calling for something else."

Defense officials have said privately that they intend to strengthen the hardware infrastructure at their West Coast bases before moving further with the contract. The VA, meanwhile, is tentatively planning to deploy its new Cerner record system in Washington and Oregon next year, linking it to the military's pilot implementation.

That effort could be imperiled if the military fails to improve its system beforehand, a congressional source said. "For now, there's nothing to build on."

James Hutton
Deputy Assistant Secretary
Office of Public and Intergovernmental Affairs
Department of Veterans Affairs
810 Vermont Ave, NW
Washington, D.C. 20420
Office: (b) (6)
Email: (b) (6) @va.gov
Twitter: @jehutton
VA on [Facebook](#) . [Twitter](#) . [YouTube](#) . [Flickr](#) . [Blog](#)



Choose VA

From: (b) (6)
Sent: Friday, May 11, 2018 3:27 PM
To: Ulyot, John <(b) (6)@va.gov>; (b) (6)@va.gov>;
Windom, John H. <(b) (6)@va.gov>; (b) (6)@va.gov>; (b) (6)
(b) (6)@va.gov>; O'Rourke, Peter M. <(b) (6)@va.gov>; (b) (6)
(b) (6)@va.gov>; Hutton, James <(b) (6)@va.gov>; Rychalski, Jon J.
(b) (6)@va.gov>; (b) (6)@va.gov>; (b) (6)
<(b) (6)@va.gov>; (b) (6)@va.gov>; (b) (6)
(b) (6)@va.gov>; (b) (6)@va.gov>; (b) (6)
(b) (6)@va.gov>; (b) (6)@va.gov>

Subject: FW: Talking Points for EHRM Signing Day

All, please see the attached edits from OMB on our rollout materials, and note their comments below. Please let me know if you have any questions or would like me to arrange a discussion with OMB to discuss. The bulk of their substantive comments appear to focus on playing up the coordination with DOD.

(b) (6)
(b) (6)

From: (b) (6)@omb.eop.gov]
Sent: Friday, May 11, 2018 2:16 PM
To: (b) (6)
Cc: Goldstein, Jeff D. EOP/OMB; Rychalski, Jon J.; Schmitt, Tricia; (b) (6)
Subject: [EXTERNAL] RE: Talking Points for EHRM Signing Day

(b) (6)

Attached are the combined OMB and DPC edits to the documents for your review. In addition to our line edits provided in the attachments, we have three overarching comments.

1. POTUS event and coordination on need to be added to the "tick-tock" schedule prior to release of the documents.
2. We recommend VA check for consistency on the interchangeable use of EHR, EHRM, EHR solution throughout the documents.
3. The coordination effort with HHS and the support to national interoperability are not mentioned in any of the documents.

Thanks,

OMB

From: (b) (6) <(b) (6)@va.gov>

Sent: Thursday, May 10, 2018 5:53 PM

To: Goldstein, Jeff D. EOP/OMB <(b) (6)@omb.eop.gov>; (b) (6)

(b) (6) <(b) (6)@omb.eop.gov>; (b) (6)

(b) (6) <(b) (6)@omb.eop.gov>

Cc: Rychalski, Jon J. <(b) (6)@va.gov>; Schmitt, Tricia

<(b) (6)@va.gov>

Subject: FW: Talking Points for EHRM Signing Day

Importance: High

(b) (6) and team, for your review, drafts of the following documents are attached:

1. Press Release – we'll be inserting a quote from A/SecVA sometime tomorrow
2. Media/Phone statement for A/SecVA - left as bullet points
3. Draft email verbiage for A/SecVA to send the VA staff
4. FAQs
5. EHRM Fact Sheet
6. Tick-tock on rollout activities

I understand you've been in contact with OPIA on these documents, so you won't be surprised that we have a **HARD deadline of noon tomorrow** for any OMB edits. Please feel free to reach out if you have any questions or comments, and thanks so much!

(b) (6)

(b) (6)

<FAQs_050718_REVIEWED.DOCX>

<SecVA Message 050918 (2).docx>

<FactSheet_050918_REVIEWED.DOCX>

<EHRM Award Statement_050918v2.docx>

<Press_Release_050918-with dollars added-v2.docx>

<Communications Award Schedule (Tick-Tock) 050918 OB edit.docx>

From: Hutton, James
Sent: 14 May 2018 09:11:13 -0700
To: Zenooz, Ashwini
Cc: (b) (6)
Subject: RE: Talking Points for EHRM Signing Day

Thanks.

James Hutton
Deputy Assistant Secretary
Office of Public and Intergovernmental Affairs
Department of Veterans Affairs
810 Vermont Ave, NW
Washington, D.C. 20420
Office: (b) (6)
Email: (b) (6)@va.gov
Twitter: @jehutton
VA on [Facebook](#) . [Twitter](#) . [YouTube](#) . [Flickr](#) . [Blog](#)



From: Zenooz, Ashwini
Sent: Monday, May 14, 2018 11:11 AM
To: Hutton, James <(b) (6)@va.gov>
Cc: Gabbert, Jeffrey A. (Mission) <(b) (6)@va.gov>
Subject: RE: Talking Points for EHRM Signing Day

Got it. I am tracking on this. We have 3 areas we are focusing TP's on and should have something back to you by this afternoon. My cell is (b) (6) if you need anything earlier and I'm cc'ing (b) (6) who is tracking closely for me.

-Ash

Ashwini Zenooz, MD
Chief Medical Officer
Electronic Health Record Modernization
Department of Veterans Affairs
O: (b) (6)
Assistant: (b) (6)@va.gov

Web: <https://vaww.ehrm.va.gov/>

From: (b) (6)
Sent: 1 May 2018 11:57:06 -0700
To: Windom, John H.
Subject: RE: (b) (6) spotted the below story from POLITICO: 'Who the hell is this person?' Trump's Mar-a-Lago pal stymies VA project

Sounds good. Thank you!

Regards,

(b) (6)
*Executive Administrative Support to
Mr. John H. Windom, Program Executive Officer
VA Electronic Health Record Modernization (EHRM)
811 Vermont Ave, Washington, DC 20420
O: (b) (6)
Web: <https://vaww.ehrm.va.gov/>
Time Zone: Eastern Standard Time*

From: Windom, John H.
Sent: Tuesday, May 01, 2018 2:48 PM
To: (b) (6)
Subject: RE: (b) (6) spotted the below story from POLITICO: 'Who the hell is this person?' Trump's Mar-a-Lago pal stymies VA project

Don't want you t reply to them at all. I got it.
Thx
John

Sent with Good (www.good.com)

From: (b) (6)
Sent: Tuesday, May 01, 2018 11:30:55 AM
To: Windom, John H.
Subject: RE: (b) (6) spotted the below story from POLITICO: 'Who the hell is this person?' Trump's Mar-a-Lago pal stymies VA project

Oh. Not at all. I just wanted to give you the opportunity to say no. I will make them go away. ☺

Regards,

(b) (6)

*Executive Administrative Support to
Mr. John H. Windom, Program Executive Officer
VA Electronic Health Record Modernization (EHRM)
811 Vermont Ave, Washington, DC 20420
O: (b) (6)
Web: <https://vaww.ehrm.va.gov/>
Time Zone: Eastern Standard Time*

From: Windom, John H.
Sent: Tuesday, May 01, 2018 2:28 PM
To: (b) (6)
Subject: RE: (b) (6) spotted the below story from POLITICO: 'Who the hell is this person?' Trump's Mar-a-Lago pal stymies VA project

Did it sound like I was anxious to meet with these folks?

Sent with Good (www.good.com)

From: (b) (6)
Sent: Tuesday, May 01, 2018 11:27:30 AM
To: Windom, John H.
Subject: RE: (b) (6) spotted the below story from POLITICO: 'Who the hell is this person?' Trump's Mar-a-Lago pal stymies VA project

I did. Did I miss something?

Regards,

(b) (6)

*Executive Administrative Support to
Mr. John H. Windom, Program Executive Officer
VA Electronic Health Record Modernization (EHRM)
811 Vermont Ave, Washington, DC 20420
O: (b) (6)
Web: <https://vaww.ehrm.va.gov/>
Time Zone: Eastern Standard Time*

From: Windom, John H.
Sent: Tuesday, May 01, 2018 2:17 PM
To: (b) (6)

Subject: RE: (b) (6) spotted the below story from POLITICO: 'Who the hell is this person?' Trump's Mar-a-Lago pal stymies VA project

Did you read the email chain?

Sent with Good (www.good.com)

From: (b) (6)
Sent: Tuesday, May 01, 2018 11:10:44 AM
To: Windom, John H.
Subject: RE: (b) (6) spotted the below story from POLITICO: 'Who the hell is this person?' Trump's Mar-a-Lago pal stymies VA project

(b) (6) s who called/emailed me:

CELL: (b) (6)
EMAIL: (b) (6) @dssinc.com

(b) (6) is the CEO for DSS Inc.

(b) (6) | President

OFFICE: (b) (6)

DIRECT: (b) (6)

CELL: (b) (6)

EMAIL: (b) (6) @dssinc.com

Regards,

(b) (6)
*Executive Administrative Support to
Mr. John H. Windom, Program Executive Officer
VA Electronic Health Record Modernization (EHRM)
811 Vermont Ave, Washington, DC 20420
O: (b) (6)
Web: <https://vawww.ehrm.va.gov/>
Time Zone: Eastern Standard Time*

From: Windom, John H.
Sent: Tuesday, May 01, 2018 2:06 PM
To: (b) (6)
Subject: RE: (b) (6) spotted the below story from POLITICO: 'Who the hell is this person?' Trump's Mar-a-Lago pal stymies VA project

Please send me a POC and I will handle myself.
Thx
John

Sent with Good (www.good.com)

From: (b) (6)
Sent: Tuesday, May 01, 2018 10:57:38 AM
To: Windom, John H.
Subject: FW: (b) (6) spotted the below story from POLITICO: 'Who the hell is this person?' Trump's Mar-a-Lago pal stymies VA project

Sir,

I received a phone call and the subsequent forwarding of this email requesting to meet with you. Given the context, they seem to think you want to see them. If this is the case, they are proposing/requesting an interaction Friday, May 4th when their CEO is in town. Please let me know how I should proceed.

Regards,

Kelli Ware
Executive Administrative Support to
Mr. John H. Windom, Program Executive Officer
VA Electronic Health Record Modernization (EHRM)
811 Vermont Ave, Washington, DC 20420
O: (b) (6)
Web: <https://vawww.ehrm.va.gov/>
Time Zone: Eastern Standard Time

From: (b) (6) [mailto:(b) (6)@dssinc.com]
Sent: Tuesday, May 01, 2018 1:51 PM
To: (b) (6)
Subject: [EXTERNAL] FW: (b) (6) spotted the below story from POLITICO: 'Who the hell is this person?' Trump's Mar-a-Lago pal stymies VA project

FYI

From: Windom, John H. <(b) (6)@va.gov>
Sent: Monday, April 30, 2018 4:49 PM
To: (b) (6) <(b) (6)@dssinc.com>; Short, John (VACO) <(b) (6)@va.gov>; (b) (6) <(b) (6)@va.gov>; Zenooz, Ashwini <(b) (6)@va.gov>
Subject: RE: (b) (6) spotted the below story from POLITICO: 'Who the hell is this person?' Trump's Mar-a-Lago pal stymies VA project

(b) (6)

The questioning would imply that we are putting our Veterans and Active duty service members at risk, and everyone on this e-mail chain takes incredible pride in supporting the men and women that are counting on us. Mission one remains our Veterans and not compromising the quality of care they are entitled to. I and many of family members including my Father are Veterans depending on our success. We are performing the requisite technical and functional due diligence to ensure our plan is achievable, including utilization of an IOC deployment process in advance of full deployment. If DSS leadership would like to come in and see me, they should do so. These types of emails and interactions with the press do not help our Veterans, nor our cause.

Thx

John

John H. Windom, Senior Executive Service (SES)
Program Executive for Electronic Health Record Modernization (PEO EHRM)

811 Vermont Avenue NW (b) (6)
Washington, DC 20420

(b) (6)@va.gov

Office: (b) (6)

Mobile: (b) (6)

Executive Assistant: (b) (6) – Appointments and Scheduling

(b) (6)@va.gov Office: (b) (6)

From: (b) (6)@dssinc.com]

Sent: Monday, April 30, 2018 4:41 PM

To: Windom, John H.; Short, John (VACO); (b) (6) Zenooz, Ashwini

Cc: (b) (6)

Subject: [EXTERNAL] RE: Jennifer spotted the below story from POLITICO: 'Who the hell is this person?' Trump's Mar-a-Lago pal stymies VA project

Thanks John! I appreciate your feedback and will share with (b) (6). He constantly brings these up....

(b) (6)

From: Windom, John H. (b) (6)@va.gov>

Sent: Monday, April 30, 2018 4:29 PM

To: (b) (6)@dssinc.com>; Short, John (VACO) (b) (6)@va.gov>; (b) (6)

(b) (6)@va.gov>; Zenooz, Ashwini (b) (6)@va.gov>

Cc: (b) (6)@va.gov>

Subject: RE: (b) (6) spotted the below story from POLITICO: 'Who the hell is this person?' Trump's Mar-a-Lago pal stymies VA project

Who said these questions are good? I find these questions to be insulting. These questions have been answered many times over as part of our overall technical and functional reviews. We understand the complexity, scalability, and other parameters influencing the success of this implementation.

John

John H. Windom, Senior Executive Service (SES)
Program Executive for Electronic Health Record Modernization (PEO EHRM)
811 Vermont Avenue NW (b) (6)
Washington, DC 20420
(b) (6)@va.gov
Office: (b) (6)
Mobile: (b) (6)
Executive Assistant: (b) (6) Appointments and Scheduling
(b) (6)@va.gov Office: (b) (6)

From: (b) (6)@dssinc.com]
Sent: Monday, April 30, 2018 4:04 PM
To: Short, John (VACO); Windom, John H.; (b) (6)
Cc: (b) (6)
Subject: [EXTERNAL] FW: (b) (6) spotted the below story from POLITICO: 'Who the hell is this person?' Trump's Mar-a-Lago pal stymies VA project

(b) (6) the CEO of DSS INC is asking some very good questions here! Thanks, (b) (6)

From: (b) (6)
Sent: Monday, April 30, 2018 2:51 PM
To: (b) (6)@vsadc.com>; (b) (6)@vsadc.com>; (b) (6)
(b) (6)@vsadc.com>; (b) (6)@vsadc.com>; (b) (6)@vsadc.com>
Cc: (b) (6)@dssinc.com>; (b) (6)@dssinc.com>; (b) (6)
(b) (6)@dssinc.com>; (b) (6)@dssinc.com>; (b) (6)
(b) (6)@dssinc.com>
Subject: RE: (b) (6) spotted the below story from POLITICO: 'Who the hell is this person?' Trump's Mar-a-Lago pal stymies VA project

What no one asks about this project is how in the hell are they going to run the VA, DoD and Coast Guard out of one system. Over 270 hospitals, over 2,000 medical and dental clinics, and over 140 VA long term care facilities. How are they going to get it running out of one database? How are they going to achieve and maintain sub-second response times? How are they going to upgrade it without any downtime? How are they going to failover to another data center in case of an outage? How are they going to pilot and implement changes to the system? Cerner hasn't released a major upgrade in over 2 years. The last time their install base experienced at least 6 hours of down time to implement it. Will this work for the VA, DoD and Coast Guard? What will this amount of risk do to innovation?

(b) (6) | President

OFFICE: (b) (6)
DIRECT: (b) (6)
CELL: (b) (6)
EMAIL: (b) (6)@dssinc.com

12575 U.S. HIGHWAY 1 | SUITE 200 | JUNO BEACH, FL 33408



From: (b) (6)@vsadc.com]
Sent: Monday, April 30, 2018 2:40 PM
To: (b) (6)@vsadc.com>; (b) (6)@vsadc.com> (b) (6)@vsadc.com>; (b) (6)@vsadc.com>
Cc: (b) (6)@DSSINC.com>; (b) (6)@dssinc.com>; (b) (6)@dssinc.com>; (b) (6)@dssinc.com>; (b) (6)@dssinc.com>; (b) (6)@dssinc.com>
Subject: (b) (6) spotted the below story from POLITICO: 'Who the hell is this person?' Trump's Mar-a-Lago pal stymies VA project

'Who the hell is this person?' Trump's Mar-a-Lago pal stymies VA project

The intercession of a well-connected Florida doctor infuriated those overseeing the \$16B contract.

By ARTHUR ALLEN

04/30/2018 05:01 AM EDT

A West Palm Beach doctor's ties to Donald Trump's Mar-a-Lago social circle have enabled him to hold up the biggest health information

technology project in history — the transformation of the VA's digital records system.

Dr. Bruce Moskowitz, an internist and friend of Trump confidant Ike Perlmutter, who advises the president informally on vet issues, objected to the \$16 billion Department of Veterans Affairs project because he doesn't like the Cerner Corp. software he uses at two Florida hospitals, according to four former and current senior VA officials. Cerner technology is a cornerstone of the VA project.

With the White House's approval, Moskowitz has been on two or three monthly calls since November with the contracting team responsible for implementing the 10-year project, according to two former senior VA officials. Perlmutter, the Marvel Entertainment chairman, has also been on some of the calls, they said.

Many doctors and health IT experts are skeptical of the VA deal — especially after the problem-ridden implementation of a similar system at military hospitals. However, the involvement of Moskowitz and Perlmutter, which has not previously been reported, infuriated clinicians involved in the VA project, including former Secretary David Shulkin, according to one of the sources, a

former senior VA official. Several officials said they thought contract negotiations had been wrapped up earlier this year and had no idea why the project was being held up.

“Shulkin would say, “Who the hell is this person who practices medicine in Florida and has never run a health care system?” said the source. He said Moskowitz’s involvement was one of the irritants in Shulkin’s dealings with other White House-appointed officials, which contributed to his being fired March 28.

The behind-the-scenes talks, where Moskowitz questioned various aspects of the program, illustrate the degree to which members of Trump’s circle have been able to influence government decisions, even about extraordinarily specialized subjects.

That involvement has stupified policymakers, especially since members of Trump’s family had pushed the opposite agenda: Trump’s son-in-law, Jared Kushner, was instrumental in Shulkin’s June 2017 decision to choose the Cerner Corp. system with a no-bid contract. Shulkin announced the Cerner deal after several White House meetings with Kushner and aides from his Office of American Innovation.

But Moskowitz's concerns effectively delayed the agreement for months, the sources said. VA spokesman Curt Cashour said Wednesday that finalizing a decision on the modernization of the VA's health record system was a priority for acting Secretary Robert Wilkie.

Cashour didn't respond specifically to questions about Moskowitz's role. "Proper due diligence is required to ensure the best interests of veterans and taxpayers are served before the department enters into any agreement of this size and importance," he said. "We are doing that now, and expect to make a final decision and corresponding announcement ... in the coming weeks."

Shulkin declined to comment for this story, as did Cerner Corp. Moskowitz and the White House did not respond to requests for comment.

Moskowitz, trained in medicine at the University of Miami, is a beloved West Palm Beach physician who sits on medical nonprofit boards with billionaires. He has invested in projects like an iPhone app to help patients find emergency care and a registry to track medical-device safety issues. Moskowitz also has "a great Rolodex," in the words of one VA

official, with many contacts at top-rank facilities such as the Mayo Clinic — where he sends his patients for specialty care.

In December 2016, he and Perlmutter helped broker a Mar-a-Lago meeting between Trump and leading health care executives from Mayo, the Johns Hopkins University Hospital, the Cleveland Clinic and other big systems.

Perlmutter, meanwhile, has been advising Trump on veterans affairs since before the inauguration. Some news reports say the Israeli-born businessman's interest in veterans stems from serving in the Six-Day War of 1967.

While Moskowitz's complaints about the software he's used in Florida are not unusual, IT specialists at the VA felt that he was out of his league in evaluating the Cerner deal. After listening to his complaints, a team of investigators from VA's Office of Information and Technology looked into the Cerner system that Moskowitz uses at two Tenet Corp. hospitals in Florida and found that it was out of date, two sources said.

Yet Moskowitz assumed that if his hospitals lacked a feature, it meant

that Cerner could not produce it for the VA, they said.

“He’d be, like, ‘It doesn’t have voice-recognition software.’ Yes, Cerner does have voice-recognition software. But it isn’t installed in all Cerner hospitals.”

“This was part of the rub between Shulkin and the Trump people,” the first source said. “This guy’s whispering in Trump’s ear, ‘I know because I have to use it!’”

Shulkin’s June 2017 decision to jettison its homegrown digital records systems was controversial from the start. Many VA physicians rate the VA system highly, but Shulkin decided it would be best to use the same Cerner software system the military had chosen in 2015 so that records could be more easily shared.

The military has experienced numerous glitches since implementing the Cerner software at four Washington state clinics and hospitals last year, however. At a hearing Thursday, Democratic Sen. Patty Murray said these problems have had a “significant morale impact on the practitioners in my state, not to mention serious concerns about putting patients’ lives at risk.”

Stacy Cummings, who runs the project for the military, testified that despite the challenges, the implementation is on track to finish nationwide in 2022. The VA is moving forward with its plan to use the same Cerner system “as far as I know,” she added.

Many health care and technology leaders view the combined VA-DoD Cerner project as a crucible for the future of computerized health care in the United States. Kushner hosted at least four White House meetings from December through February at which the project was central to discussions.

VA officials were aware of the potential pitfalls. Last fall, Shulkin postponed signing the final agreement while seeking assurance that the Cerner software could enable health data exchange with private-sector doctors who see veterans. But the contract appeared to be back on track in January after delivery of an independent report Shulkin commissioned to review the issue.

“I thought it was going to be done in a few days after that,” said a congressional source who tracks the deal. “Now it looks like there isn’t any tangible path forward.”

In a related move, an individual with ties to Trump-appointed VA officials said last week that an inspector-general's report had been opened into the Cerner sole-source purchase.

Several IT experts consulted on this story said they thought the Cerner deal eventually would go through. Most said it would not be realistic to expect officials to renegotiate the contract or ditch it to stay with the VA's internal software system.

"We just had to make the Mar-a-Lago guys comfortable with the deal," said a current VA official. "They have someone's ear. Power and influence are power and influence."

From: (b) (6)
Sent: Monday, April 30, 2018 1:14 PM
To: (b) (6)@vsadc.com>
Subject: FW: POLITICO: 'Who the hell is this person?' Trump's Mar-a-Lago pal stymies VA project

Should we share with DSS?

From: (b) (6)
Sent: Monday, April 30, 2018 12:51 PM
To: (b) (6)@vsadc.com>; (b) (6)@vsadc.com>; (b) (6)@vsadc.com>; (b) (6)@vsadc.com>
Subject: POLITICO: 'Who the hell is this person?' Trump's Mar-a-Lago pal stymies VA project

In case you did not already see this story...

'Who the hell is this person?' Trump's Mar-a-Lago pal stymies VA project
POLITICO

The intercession of a well-connected Florida doctor infuriated those overseeing the \$16B contract. [Read the full story](#)

Shared from [Apple News](#)

Sent from my iPhone

From: Sandoval, Camilo J.
Sent: 2 Apr 2018 22:38:23 -0500
To: Windom, John H.;Zenooz, Ashwini;Short, John (VACO)
Subject: FW: [EXTERNAL] How is patient-centric interoperability leading the revolutionary healthcare transformation?

-----Original Message-----

From: Bruce Moskowitz
Sent: Monday, April 02, 2018 6:35 AM
To: Sandoval, Camilo J.
Subject: [EXTERNAL] How is patient-centric interoperability leading the revolutionary healthcare transformation?

<https://www.beckershospitalreview.com/healthcare-information-technology/how-is-patient-centric-interoperability-leading-the-revolutionary-healthcare-transformation.html>

Sent from my iPad
Bruce Moskowitz M.D.

From: Windom, John H.
Sent: 2 Apr 2018 06:52:25 -0700
To: Zenooz, Ashwini
Subject: FW: Contract Language

Fyi.

John H. Windom, Senior Executive Service (SES)
Program Executive for Electronic Health Record Modernization (PEO EHRM)
Special Advisor to the Under Secretary for Health
811 Vermont Avenue NW (b) (6)
Washington, DC 20420
(b) (6) @va.gov
Office: (b) (6)
Mobile: (b) (6)
Executive Assistant: (b) (6) Appointments and Scheduling
(b) (6) @va.gov Office: (b) (6)

From: Blackburn, Scott R.
Sent: Monday, April 02, 2018 9:41 AM
To: Sandoval, Camilo J.
Cc: Windom, John H.
Subject: RE: Contract Language

Morris, Genevieve (OS/ONC/IO) (b) (6) @hhs.gov

I don't think I have a phone number for her, but will let you know if I can find it.

From: Sandoval, Camilo J.
Sent: Monday, April 02, 2018 9:03 AM
To: Blackburn, Scott R.
Cc: Windom, John H.
Subject: RE: Contract Language

Scott, Do you have Genevieve's work email address and phone number? I need to contact her today and not sure where I can find her or if she is at the VA yet.

Thank you,
Camilo

From: Blackburn, Scott R.
Sent: Sunday, April 01, 2018 6:28:05 PM

To: Sandoval, Camilo J.
Cc: Windom, John H.
Subject: RE: Contract Language

Yep, I know Genevieve. She is good. Will give it some thought. Is she detailed in to VHA I assume?

From: Sandoval, Camilo J.
Sent: Sunday, April 01, 2018 8:39 PM
To: Blackburn, Scott R.
Cc: Windom, John H.
Subject: RE: Contract Language

Excellent, I'll touch base with Windom tomorrow morning.

Also, there's someone by the name of Genevieve Morris from the Office of National Coordinator (ONC) joining the VA tomorrow on a 120 day detail. I believe she will be helping us review the contract as well, at least with regards to interoperability, and already working with the EHR team.

Do you know (of) her? Any thoughts on how we might utilize her expertise in combination with (b) (6) beyond just reviewing the Cerner contract? She seems to have a solid policy background in her respective space. Do you see Genevieve and Rasu working together to cover the policy and functional aspects of Interoperability?

Camilo

From: Blackburn, Scott R.
Sent: Sunday, April 01, 2018 4:38:47 PM
To: Sandoval, Camilo J.
Cc: Windom, John H.
Subject: RE: Contract Language

Not sure we did. John?

What he might be talking about is the feedback from the calls we had 2 weeks ago. I believe John and team have created a thorough matrix to reconcile that feedback (and Ash did follow ups with each to make sure we understood their feedback and then understood how we were reconciling that feedback). There was also the language that we received via OGC.

I'll leave it to John to weigh in.

From: Sandoval, Camilo J.
Sent: Sunday, April 01, 2018 7:35 PM
To: Blackburn, Scott R.

Cc: Windom, John H.

Subject: Re: Contract Language

Scott,

I just spoke with Bruce Moskowitz regarding where things are with EHR and he mentioned you recently received language provided by several CIOs (b) (6). Could you kindly forward me those emails and documents? I believe it was in regards to interoperability.

Hope you had a great Easter Sunday.

Thank you.

Camilo

From: Windom, John H.
Sent: 2 Apr 2018 11:32:47 +0000
To: Blackburn, Scott R.
Subject: RE: Contract Language

Negative Sir.
Vr
John

Sent with Good (www.good.com)

From: Blackburn, Scott R.
Sent: Sunday, April 01, 2018 7:26:06 PM
To: Windom, John H.
Subject: FW: Contract Language

Did you know anything about Genevieve Morris coming in?

From: Sandoval, Camilo J.
Sent: Sunday, April 01, 2018 8:39 PM
To: Blackburn, Scott R.
Cc: Windom, John H.
Subject: RE: Contract Language

Excellent, I'll touch base with Windom tomorrow morning.

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Camilo

From: Blackburn, Scott R.
Sent: Sunday, April 01, 2018 4:38:47 PM
To: Sandoval, Camilo J.

Cc: Windom, John H.
Subject: RE: Contract Language

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From: Sandoval, Camilo J.
Sent: Sunday, April 01, 2018 7:35 PM
To: Blackburn, Scott R.
Cc: Windom, John H.
Subject: Re: Contract Language

Scott,

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Hope you had a great Easter Sunday.

Thank you.
Camilo

From: Windom, John H.
Sent: Friday, March 23, 2018 1:47 PM
To: Blackburn, Scott R.; Bowman, Thomas
Cc: Zenooz, Ashwini; Short, John (VACO)
Subject: RE: [EXTERNAL] Re: VA EHR

Mr. Blackburn,

Not sure where Mr. Sherman is going with his comments but our language in the contract is consistent with the requirements of our Clinicians, various external reviews and the Mitre report. Mr. Sherman is seeking specificity in the interoperability realm that simply does not exist today and is evolving even as I type. We have provisions in the EHR contract to insert technology as we, the VA, as well as to incorporate evolving technology and standards. The DVP acquisition is our bridge to the use of APIs (gateways), FHIR, etc. We have modified our interoperability language (below) based on the Mitre and the many external reviews to give us the utmost flexibility over the 10-year life of this contract. The Secretary personally halted the recent phone call to stop Marc Sherman, et. al's parade of national interoperability objectives as not feasible at this juncture "anywhere," but included as part of our overall interoperability strategy that includes the DVP acquisition/strategy. We are committed to establishing the interoperability test bed/sandbox at IOC to solidify our interoperability objectives prior to full deployment to the enterprise. In addition, I believe Mr. Sherman meant to highlight section 5.5.1 which speaks to the data domains that were called into question and their inclusion in the contract. They are clearly in the contract as captured below. Mr. Sherman does not understand the culture of VA or the federal government. We have an incremental/iterative change management strategy that will culminate in a successful EHR Modernization effort. He appears to be more of a "big bang" theory guy. The problem is, we must continue to deliver uninterrupted and quality care to our Veterans during the transformation within the parameters of the law and other regulations/policies (e.g. cybersecurity, cloud, etc.) bounding our integration/implementation strategies. Our existing language is sound and appropriately balances change management risks, future insertion of technology, innovation opportunities, standards development, etc. without artificially inflating the cost of the contract through the incorporation of excess specificity that never materializes in practice. Through the Initial Operating Capabilities (IOC) process and the judicious issuance of task orders, we will have the ability to change course direction as appropriate without excess risk to the taxpayers or our overall success. Mr. Sherman continues to fail to recognize that it is Program Management Oversight (PMO) and VA commitment to change management that will drive our success in these areas, not more words in the contract.

V/r,
John

IDIQ PWS 5.5.1: Workflow Development and Normalization:

j) The Contractor shall enable configuration of the application that supports external community data without requiring the clinician to go to special screens to see and use reconciled external

data. By IOC entry, the Contractor shall support incorporation of the following external community data domains, including but not limited to these domains and sub-domains:

- Problems
- Allergies
- Home Medications
- Procedures - including associated reports and with appropriately filtered CPT codes
- Immunizations
- Discharge Summaries
- Progress Notes
- Consult Notes
- History & Physicals
- Operative Notes
- Radiology and Diagnostic Reports (Into “Documentation” component)

By IOC exit, the Contractor shall support incorporation of the following external community data domains, including but not limited to these domains and sub-domains:

- Results
 - o Labs
 - General
 - Pathology and Microbiology
 - o Vitals
- Radiology and Diagnostic Reports (Into “Diagnostic Report” component)
- Images

IDIQ PWS Section 5.10.4: Seamless Interoperability / Joint Industry Outreach includes significant detail on the topic. The interoperability section is copied below this table for reference.

IDIQ PWS section 5.5.4 Data Exchange - Application Program Interface (API) Gateway also includes detail on the creation of strategic open APIs.

VA NF-177: Interoperability - Data Standards: The system shall support the use of the health data standards identified in the VA DoD Health Information Technical Standards Profile and by the VA DoD Interagency Clinical Informatics board, including following common data standards: National Information Exchange Model NIEM; Health Level 7 HL7; Logical Observation Identifiers, Names and Codes LOINC; Systematized Nomenclature of Medicine SNOMED; RxNorm, MedRT, ICD, CPT, HCPCS, Veteran Information Model VIM; and Healthcare Information Technology Standards Panel HITSP as well as VA/DOD/IPO extensions to these standards.

VA-NF-T23: Informatics - Care Integration: VA must be able to seamlessly integrate with HIE and external-to-EHR shared services to provide for a seamless experience and to more effectively integrate in community care efforts, as well as with other parts of VA (e.g., identity management). This includes but is not limited to the EHR product ability to support external shared services (SOA services, such as identity management, care plan service, scheduling, etc.) accessed via standards-based APIs. (Process Continuity, Evolution, Extension) KSR5 [NOW +]

VA NF-Z11: Health Information Exchange: The system shall support VA electronic exchange of health records via other interoperable networks (e.g. CareQuality, CommonWell Health Alliance,

DirectTrust, National Association for Trusted Exchange) by supporting their specifications, security and content specifications

5.10.4 Seamless Interoperability / Joint Industry Outreach

The Contractor is required to collaborate with VA affiliates, community partners, EHR providers, healthcare providers, and vendors to advance seamless care throughout the health care provider market. Seamless care will require the creation of an integrated inpatient and outpatient solution with software components that have been designed, integrated, maintained, and deployed with a design architecture that allows for access to and sharing of common data and an enabling security framework that supports end-to-end healthcare related clinical and business operations. Seamless care is the experience patients and providers have moving from task to task and encounter to encounter within or between organizations such that high-quality decisions form easily and complete care plans execute smoothly. Information systems support the seamless-care experience by gathering data, interpreting data, presenting information, and managing tasks. Currently, industry lacks specific and uniform interoperability standards to support seamless care between organizations that employ different EHR systems. The Requirements Traceability Matrix Section D, Attachment 003, sets forth specific Informatics and Interoperability contract requirements. To accomplish this, the Contractor shall provide software and services to enable seamless care between VA encounters, encounters with other Government healthcare institutions, and outside entities through advancements in all areas of the EHR that occur. In addition, the software and services shall support the VA designated standards, such as SMART on FHIR and SMART-enabled applications, or other published standards.

The objective of these interoperability solutions is to advance the state of the art supporting seamless care for Veterans. Existing organizations promoting interoperability among EHR vendors, such as The Argonaut Project, have developed or are planning to develop technology standards or technical approaches that may support the EHRM seamless care strategy. To the extent that underlying third party technology is available or made available to meet the following timelines, the following interoperability software solutions and services shall be delivered under this section:

- a) By Initial Operating Capability (IOC), the Contractor shall provide a software solution enabling VA, DoD and community providers who have connected to the EHRM to share interactive care plans (ICPs) for Veterans. ICPs will enable collaborative communication between providers, and between providers and Veterans, in managing Veteran care.
- b) Within 24 months of applicable task order award, the Contractor shall provide a software solution enabling VA, DoD and connected community providers to complete referral management activities for Veterans.
- c) By IOC, the Contractor shall provide a software solution enabling VA to release and consume, via on-demand access, a Veteran's complete longitudinal health record to and from DoD and connected community partners, irrespective of which EHR they use, provided such EHR technology is certified by the Health and Human Services Office of the National Coordinator (ONC) or its successor. The longitudinal record solution shall support Provider-to-Provider record sharing, as well as Provider-Veteran-Provider sharing (Veteran mediated record sharing), including appropriate consent management. The bi-directional health information exchange shall maximize use of discrete data that supports context-driven clinical decisions and informatics.

- d) Within 24 months of applicable task order award, the Contractor shall provide a software solution enabling connected VA, DoD and community providers connected to the EHRM to send and receive Admission/Discharge/Transfer notifications “pushed” from the provider initiating a Veteran care event to enable proactive engagement by VA care coordinators when notified of a Veteran care event.
- e) Within 24 months of applicable task order award, the Contractor will demonstrate a solution for identification and management of Veterans at high risk of suicide, in collaboration with community partners.
- f) By IOC, the contractor shall provide URL based image access to the VA, community and academic partner systems who can support the URL and a viewer to the providers via the health information exchange networks. Within 36 months of applicable task order award, the Contractor shall provide a software solution enabling VA, DoD and community providers connected to the EHRM to have nationwide access to Veterans’ imaging associated with diagnostic tests.
- g) By IOC, the Contractor shall provide a software solution for multilateral standards-based ingestion, normalization, storage, and exporting of Health Information Exchange acquired Veteran health information. The Contractor shall ensure that the solution provides a computable dataset for purposes of population health and research analytics, clinical decision support, and workflow integration.
- h) By IOC, the Contractor shall provide the capability to connect and exchange VA electronic health records via other interoperable networks, such as. eHealth Exchange, CareQuality, CommonWell Health Alliance, DirectTrust, National Association for Trusted Exchange by supporting their specifications, security and content specifications. Contractor shall support network record locator services and patient provider associations as applicable in accordance with applicable technical standards and the Trusted Exchange Framework and Common Agreement (TEFCA).
- i) By IOC, the Contractor shall provide a capability for provider collaboration via secure e-mail using the ONC Direct protocol or future VA-designated standard within a Cerner Millennium EHR workflow context.
- j) Within 36 months of applicable task order award, the Contractor shall provide a solution for a Software Development Kit (SDK) enabling standards-based applications (e.g., SMART, FHIR, etc.) integrated with EHRM solutions and platforms.
- k) Cerner shall deliver annually an Interoperability Plan to the VA on how it intends to meet the objectives established in PWS section 5.10.4. The initial plan will be due within 3 months of applicable TO award.
- l) The Contractor shall conduct an annual Interoperability Self-Assessment against standards that shall be specified by VA, such as those promulgated by HIMSS or future standards to be identified by VA. The annual self assessment shall report on the state of each data element (e.g., which are supported in what capacities and in which formats). This will help assure standards implementation consistency and assure standards compliance with evolving national standards.
- m) The Contractor shall support Knowledge Interoperability by supporting the extension of clinical content assets such as terminologies, clinical decision support rules, and order sets, etc., to the extent such extensions are consistent with the model and best practices of the controlling national standard. This includes the ability to curate, extend, and share that knowledge with clinical partners. This fosters rapid adoption from industry best practices, e.g., clinical professional societies.

5.10.4.1 Data Design and Information Sharing

In support of the interoperability objectives under this Section, agreed upon Contractor proprietary information/data model extension points (e.g., ingestion and record APIs) may be provided to both international and national standards designating organizations as described and set forth in an applicable Task Order. The Contractor shall provide VA access and usage rights into any underlying proprietary terminology/code systems for the purpose of enhancing national standards to address any gaps identified in the EHRM solution. The Contractor shall also make the interoperability capabilities and product enhancements developed under this contract available to non-VA Cerner clients.

5.10.4.2 VA Digital Health Platform/Digital Veterans Platform Integration

VA anticipates developing a Digital Health Platform/Digital Veterans Platform (DVP) to consolidate critical VA EHR and non-EHR operational systems. The Contractor shall integrate the EHRM to interoperate with DVP, or future state VA platform, including the DVP API gateway or any other method designated by VA.

John H. Windom, Senior Executive Service (SES)
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Special Advisor to the Under Secretary for Health
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(b) (6)@va.gov Office: (b) (6)

From: Blackburn, Scott R.
Sent: Friday, March 23, 2018 12:15 PM
To: Windom, John H.; Bowman, Thomas
Subject: FW: [EXTERNAL] Re: VA EHR

John - you might want to swing the by Secretary/Deputy's office before end of day to get a sense of where he is with respect to this.

Sent with Good (www.good.com)

From: Marc Sherman
Sent: Friday, March 23, 2018 9:47:39 AM

To: Blackburn, Scott R.
Cc: Bruce Moskowitz; DJS
Subject: [EXTERNAL] Re: VA EHR

Scott,

Thanks for inviting me to listen in on your calls this week with the subject matter experts. I was happy to make time to participate as requested and always happy to provide my thoughts for your consideration when requested.

I read carefully your email about the efforts to work out the holes raised by the experts. You are on the way to kicking off an exciting project with a highly respected Contractor/vendor and a VA team that has worked very hard; and I know everyone has the goal to build the best next generation system for the veterans' healthcare. However, there were several major issues raised in the calls this week with the technical and clinical experts that you try to explain away in your email as solved, but indeed are not according to the experts. These issues, they believe, will prevent a successful implementation and I fear come back to haunt this project and its overseers. I hate to be a naysayer, but I respectfully don't agree with some of your conclusions expressed in your email when I listen to the experts with whom you consulted; and the experts are in fact not swayed by the follow-up conversations with them. The experts are recommending a system for the VA that has various enhancements to today's standard system functionality. At a minimum, I heard those experts express their opinions that the contract dangerously lacks definitions, standards and a clear expression of this required, defined enhanced (non-standard) functionality (they articulate it much better than I).

Failing to express this type of definitional clarity in the contract is an invitation to ambiguity, disputes and ultimate failure of purpose. The best "oversight and management of the contract" will not turn a contract lacking specificity into a vision of clarity. Including contractual clarity allows the Contractor to understand TODAY what is expected so that today it can confirm its agreement to provide the full functionality desired and have a better understanding of what is expected of them. Clarity in the contract is a healthy ingredient for the VA and the Contractor.

I would be delighted to be wrong and welcome a demonstration of where Section 5.1 of the contract provides this specificity that Drs. Cooper and Huff, for example, urged. In light of the system requirements that these experts say must be included, which are enhancements of today's standard deliverables, the contract language is ambiguous. You say that "risk cannot be 100% driven out of any transformation of this magnitude," a concept to which I subscribe. However, when you substitute this concept for clear, written and defined functionality, especially for a design that is expected to be unique in many respects, you are doomed to disappointment and conflict.

I am sorry to be so harsh in my opinions, but the experts are so united on this point; and together with my historical observations of failures in nearly identical situations I just see warning flares going off. Scott, I want to see this project get started, and quickly, as much as anyone, but with the clarity that equally serves the VA and the Contractor, and prevents evident problems down the road. I also believe these things are easy to resolve in the contract language in relatively minimal time.

Just my opinion and food for thought as you make your decisions.

Marc

On Wed, Mar 21, 2018 at 10:19 PM, Blackburn, Scott R. <(b) (6)@va.gov> wrote:
Marc / Bruce,

Thank you once again for all your support and especially for linking us up with these CIOs/experts. This was incredibly valuable. Secretary Shulkin, John Windom and I got together earlier today as well to talk about the path ahead. A few notes:

- In order to make sure we understand some of the more specific detailed points, members of our team reached out today for individual follow ups with (b) (6) (b) (6). Each have been so generous with their time – (b) (6) will host us for a visit on April 4 and Dr. Cooper offered to do the same at Mayo.
 - Dr. Zenooz did connect with (b) (6) today on the point Marc highlights below to make sure we are on the same page and have the language right (part was us better understanding his point; part was pointing him to the specific language in 5.1.1 and giving him the broader context with what we are doing with Lighthouse as our API gateway and the VA Open API Pledge that 11 healthcare institutions signed two weeks ago include (b) (6) at Mayo as well (b) (6) at Intermountain and (b) (6) at Partners).
 - We will also follow up with (b) (6) on some of the issues he raised as well. For example: (b) (6) will be excited to learn that Cerner has prioritized an additional 40 engineers to accelerate FHIR APIs for VA in support of this contract. This will also benefit Intermountain as (b) (6) was telling us they've only had 10-15 for their entire company to date. If VA/DoD/Intermountain work together we will quickly get to the 200 number (b) (6) mentioned.
- Per (b) (6) suggestion, we are going to start moving forward ASAP on formalizing an Advisory Committee so that we can get these insights on an ongoing basis. Formalizing this will allow for continuity of expertise throughout our journey. Obviously we will want (b) (6) etc. (b) (6) (Mayo), (b) (6) or (b) (6) Cleveland Clinic), (b) (6) American College of Surgeons) are others you've introduced us to along the way that we would love to include. We would like to work with you to make sure we get this right.

- As recommended last night, an interoperability sandbox/test bed will be established during our Initial Operating Capabilities (IOC) implementation/deployment process to solidify the requisite interoperability requirements prior to full enterprise deployment. This is a great suggestion and very consistent with what we have been hearing from many experts.
- Our team is reviewing all the feedback (both oral from the calls and the written notes that some provided) and cross-walking this against the language in the RFP/contract documents (both EHR and also Lighthouse). We are not seeing any major changes to the contract nor do we see any showstoppers. Upon receiving the feedback, we feel very good that we have a solid contract from which we will just need to make minor revisions.
- After discussing this with Secretary Shulkin today, we feel strongly about moving forward quickly. We will make any necessary tweaks with Cerner ASAP (we absolutely do not anticipate any push back; and Cerner has promised to turn things around immediately) and will move forward to sign the overarching IDIQ contract. Assuming Congress approves the Omnibus bill by Friday (and President Trump signs it), we will then have the funding and authority to do so – and Secretary Shulkin could sign as early as next week. If the Omnibus falls through (which let's hope not), then we would have to request a transfer from the Congressional appropriation committees which will then take ~2 weeks. Signing the initial task orders will allow us to start moving forward with Cerner on the initial 3 hospitals (which will be in Washington state) on things like site surveys, infrastructure readiness, data hosting, change management (with will include wide involvement from clinicians inside and outside VA...something we heard loud and clear from Bruce!), help desk establishment, and project oversight (which we've heard loud and clear from Stephanie/Jon). As a reminder, given the IDIQ structure of the contract we would not be signing the full contract (rather just Year 1 – which is ~5% of the value of the contract). But this will allow us to get moving and out of the "quicksand".
- Marc makes a great point below on turning DoD's struggles into a positive. We have been working very closely with the DoD team over the past 9 months (I now have my own Pentagon ID pass I am there so much; John and I work very closely with their EHR lead Stacy Cummings; John Windom talks to her several times a week). We have incorporated a lot of their stumbles into our contract (e.g., data migration was a big issue with Congressman Phil Roe and we addressed that; and most recently we have made some adjustments on trouble ticket management based on what you've read in the papers). We are paying very close attention to their implementation issues (workflow, change management, governance) to make sure we don't make the same mistake twice. DoD's biggest problems are around implementation and change management. This underscores Bruce's point of making sure we have clinician buy-in

and involvement from the get-go (I couldn't agree more). This will make getting move on change management in Task Order #1 so important.

- As you both know, risk cannot be 100% driven out of any transformation of this magnitude. (b) (6) so succinctly captured, "it is the oversight and management of the contract that will be of the utmost importance, as well as the VA'S access to senior industry advisors." I think we have a great plan. The biggest thing I worry about will be executing and we are definitely going to need all the help we can get.

Again, we believe the construct of the contract, and more importantly the proper oversight and management of the contract will greatly mitigate cost, schedule and performance concerns, as well as support the timely injection of technological advancements (e.g. cloud, APIs, etc.) at the appropriate pace and balance necessary to support our Veterans without jeopardizing our overall care. Interoperability remains at the forefront of our concerns, and your comments, the MITRE study and various other external inputs contributing significantly to our RFP language and corresponding requirements. Interoperability will be a moving target for years to come, but our contract allows us to leverage the best of ideas of industry throughout the contract's life without incurring the exorbitant costs you have alluded to, as well as not be bound by potentially antiquated definitions .

Bruce/Marc, thank you for everything. As I mentioned to Bruce recently, you have been tremendous "demanding partners" on this journey and we are incredibly appreciate. We look forward to continuing this relationship as we take the next steps.

Scott

From: Marc Sherman [mailto:(b) (6)@gmail.com]
Sent: Wednesday, March 21, 2018 9:31 AM
To: Blackburn, Scott R.
Cc: DJS
Subject: Re: [EXTERNAL] Re: Stan Huff

I agree that the call was very helpful. I spent the night after the call reflecting on some of the discussion and thought I would offer some reaction/feedback that still seems unsettled. I will outline my nighttime thoughts below in case you find them useful.

1. I thought that (b) (6) made a good case for inserting specific definitions and standards on the meaning and use of "interoperability," especially since that term has as many meanings in the industry as those who speak it. It is so easy for the contractor to proceed down a design path using one definition or standard while the users will require a totally different standard. That runs the risk of not being discovered until later, perhaps even up to implementation, a very costly result. Perhaps a similar problem (a seemingly big problem) that the DOD implementation faces now where the users are rebelling. Unfortunately, if this "gap" in definition is not discovered until IOC, it will be very

difficult and very expensive to fix (ala the DOD problem). I agree with (b) (6) why not set the critical definitions and standards in the contract (PWS) now and eliminate the chance for any confusion or ambiguity. It will pay dividends later in terms of less arguments, better initial design, happier user community, less overall cost, better healthcare delivery, etc. Then, with the standard fully defined and set in the original PWS, the mock-up test will be much sooner in time and much more complete the first time, allowing the users to provide input sooner and better, eliminating costly design mistakes from the beginning. The user community can tell you today what is needed to accomplish this "next generation" system that will be a model for the country and the future of healthcare (as (b) (6) envisioned on the call last night). Why would you not want to tell the contractor the specifics of that now, in fairness to them, the VA, the patients and healthcare, so they can proceed with that standard from day one or express any concerns they may have now instead of in the future after costly design has occurred? Why would you not want to be specific in the contract to prevent ambiguity? Dr. Shulkin pushed back on (b) (6) view as already accomplished in the PWS and cited Section 5 (I believe he said section 5.1.1) of the PWS. (b) (6) as a physician user and not a technician, deferred on the effectiveness of the existing contract language to others, but commented that the CIO of MAYO read the contract and also did not think it adequately contained the right defining language to set out unambiguous definitions and standard. I have read the contract again last night and happen to agree, or am missing it. If I am wrong, it would be useful for someone to point me in the right direction.

2. I was also thinking about the current reported problems of the DOD implementation seemingly caused by a user (clinician) revolt over inadequacy (or unsuitability) for their needs. The VA runs that same risk. Perhaps that problem could be a benefit to your effort. Why not accumulate all of the user complaints/issues in the DOD implementation identified by the users and chart them out. Then identify which of those issues would be issues if they existed in the VA implementation and include them in the contract as definitional requirements. You have the benefit of knowing the failures in the very system upon which you are modeling your system...and you have an added advantage and opportunity to contractually prevent similar mistakes.
3. I have other thoughts as well that we should discuss, but these are the ones that I felt more pressing to highlight since I will be unavailable today.

Best

Marc

On Wed, Mar 21, 2018 at 8:24 AM, Blackburn, Scott R. <(b) (6)@va.gov> wrote:

No problem Marc. Thanks for all your help. Very helpful call last night.

From: Marc Sherman [mailto:(b) (6)@gmail.com]

Sent: Wednesday, March 21, 2018 12:12 AM

To: Blackburn, Scott R.

Subject: [EXTERNAL] Re: Stan Huff

Scott

I won't be able to join the call tomorrow as I have a previous commitment that I cannot move. I will catch up with you or Bruce after.

Marc

Marc Sherman

(b) (6)

On Tue, Mar 20, 2018, 10:30 PM Blackburn, Scott R. <(b) (6)@va.gov> wrote:

Bruce/Marc – thanks for introducing us to all the experts we talked to tonight. It was extremely valuable.

We have (b) (6) from Intermountain tomorrow at 10am. I assume you have the calendar invite, but just in case it is (b) (6)

We have been unable to schedule anything with (b) (6) (very busy calendar). We will try.

Scott

Scott Blackburn

Executive in Charge, Office of Information & Technology

US Department of Veterans Affairs

From: Blackburn, Scott R.
Sent: Friday, March 23, 2018 12:08:22 PM
To: Windom, John H.; Bowman, Thomas
Cc: Zenooz, Ashwini; Short, John (VACO)
Subject: RE: [EXTERNAL] Re: VA EHR

I agree. Please connect with the Secretary today to make sure we are all on the same page.

This is a case of continuing to talk past each other (given Marc doesn't understand the context of government nor does he understand the contract). We can do an interoperability sandbox/test platform, but we still need to sign the contract. In fact, I think we need to sign the contract in order to do this. Not signing the contract essentially kills the deal.

From: Windom, John H.
Sent: Friday, March 23, 2018 1:55 PM
To: Blackburn, Scott R.; Bowman, Thomas
Cc: Zenooz, Ashwini; Short, John (VACO)
Subject: RE: [EXTERNAL] Re: VA EHR

Mr. Blackburn,

I went back and read Mr. Sherman's email and reviewed my notes. I see no recommended language for insertion in the contract to address his concerns. What it appears to be is a push to perform an interoperability sandbox/test platform in advance of contract award.

Vr

John

John H. Windom, Senior Executive Service (SES)
Program Executive for Electronic Health Record Modernization (PEO EHRM)
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On Wed, Mar 21, 2018 at 8:24 AM, Blackburn, Scott R. <(b) (6)@va.gov> wrote:

No problem Marc. Thanks for all your help. Very helpful call last night.

From: Marc Sherman [mailto:(b) (6)@gmail.com]

Sent: Wednesday, March 21, 2018 12:12 AM

To: Blackburn, Scott R.

Subject: [EXTERNAL] Re: (b) (6)

Scott

I won't be able to join the call tomorrow as I have a previous commitment that I cannot move. I will catch up with you or Bruce after.

Marc

Marc Sherman

(b) (6)

On Tue, Mar 20, 2018, 10:30 PM Blackburn, Scott R. <(b) (6)@va.gov> wrote:

Bruce/Marc – thanks for introducing us to all the experts we talked to tonight. It was extremely valuable.

We have (b) (6) from Intermountain tomorrow at 10am. I assume you have the calendar invite, but just in case it is (b) (6)

We have been unable to schedule anything with Dr. Ko (very busy calendar). We will try.

Scott

Scott Blackburn

Executive in Charge, Office of Information & Technology

US Department of Veterans Affairs

From: Zenooz, Ashwini
Sent: 23 Mar 2018 11:36:42 -0500
To: Blackburn, Scott R.; Short, John (VACO)
Subject: RE: [EXTERNAL] Re: VA EHR

Will do

Sent with Good (www.good.com)

From: Blackburn, Scott R.
Sent: Friday, March 23, 2018 9:34:21 AM
To: Zenooz, Ashwini; Short, John (VACO)
Subject: RE: [EXTERNAL] Re: VA EHR

Share this with Windom so he has this when he talks to the Secretary. Marc doesn't understand what is in the contract.

Sent with Good (www.good.com)

From: Zenooz, Ashwini
Sent: Friday, March 23, 2018 12:24:36 PM
To: Blackburn, Scott R.; Short, John (VACO)
Subject: RE: [EXTERNAL] Re: VA EHR

Interesting. Btw, I think (b) (6) questions were answered in 5.5.1 but I will double check.

(b) (6) was very happy we had drilled down into medical devices and integration. I had forwarded you the sections I discussed with him.

I know Short was connecting with (b) (6) and (b) (6) on technical elements but you saw my note that Cerner will stand up the FHIR term server.

(b) (6) has been supportive and I have already sent her our mock cases and she said she will volunteer her people to help us with it.

I'm very lost in what else is missing here.

Thank you for sending this to us.

Ash

Sent with Good(www.good.com)

From: Blackburn, Scott R.
Sent: Friday, March 23, 2018 9:16:15 AM
To: Zenooz, Ashwini; Short, John (VACO)
Subject: FW: [EXTERNAL] Re: VA EHR

I already sent to Windom and DepSec. I told Windom to get with the Secretary today to gauge his reactions.

Sent with Good(www.good.com)

From: Zenooz, Ashwini
Sent: 6 Mar 2018 08:45:38 -0600
To: Windom, John H.;Blackburn, Scott R.;Short, John (VACO)
Subject: RE: [EXTERNAL] Fwd: EMR

On physician and patient centric EHR: creating workflows with front line providers in-mind and engaged is the core part of change management strategy. Business and Clinical Requirements for Phase 1 of the acquisition were provided by Integrated Teams comprised of 200+ front line clinicians. Phase 2: in-depth workflow development for Cerner to implement at each site with follow a similar model. We are NOT adopting run-of-the-mill Cerner workflows. They will be configured based on requirements set forth by VA Clinical teams and Clinical Practice Guidelines.

Patient Perspective: We have engaged with VA patient centered design teams since day 1 of the project and our baseline discussions with Cerner started with the Veteran journey. Additionally, VSOs have been very engaged and have been/will be part of the design input and review as we implement patient portal, mobile scheduling etc.

Patient Centric EHR: Our focus is on providing high quality, value-based care and that was the basis of the “Choose VA” campaign. The goal of this implementation is to enable reliable metrics and data returns, measure outcomes so that patients have faster, access to quality care.

Please let me know if there are questions.

I'll be at the Venetian all day (b) (6) or (b) (6)

Ash

Sent with Good (www.good.com)

From: Windom, John H.
Sent: Tuesday, March 06, 2018 6:16:13 AM
To: Blackburn, Scott R.; Zenooz, Ashwini; Short, John (VACO)
Subject: RE: [EXTERNAL] Fwd: EMR

Ash and John S.,

Please provide a one short paragraph technical and functional response for Mr. Blackburn to these elements that we have covered as part of our efforts. I can tell that our journey is coming to a close in the good Doctor's mind. Please do not create any ambiguity or open up any cans of worms in your responses. “Clear and concise.” Thank you. Break Mr. Blackburn/I provided you the Apple comparison matrix awhile back but will send you again. My e-mail highlighted that

the Apple solution that was announced is effectively portable electronic file cabinet not an EHR/EMR.

V/r,
John

John H. Windom, Senior Executive Service (SES)
Program Executive for Electronic Health Record Modernization (PEO EHRM)
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From: Blackburn, Scott R.
Sent: Tuesday, March 06, 2018 8:42 AM
To: Windom, John H.; Zenooz, Ashwini; Short, John (VACO)
Subject: FW: [EXTERNAL] Fwd: EMR

See email below. Any thoughts on how to respond?

Sent with Good (www.good.com)

From: David Shulkin
Sent: Tuesday, March 06, 2018 7:09:43 AM
To: Blackburn, Scott R.
Subject: [EXTERNAL] Fwd: EMR

Can we begin to address and then ill respond back?

Sent from my iPhone

Begin forwarded message:

From: Bruce Moskowitz <(b) (6)@mac.com>
Date: March 5, 2018 at 6:49:58 AM EST
To: (b) (6)@gmail.com, (b) (6)@reagan.com
Cc: (b) (6)@gmail.com, IP (b) (6)@frenchangel59.com>, (b) (6)@gmail.com
Subject: EMR

I would like to underscore the importance of getting the “Cloud” correctly and the other four issues with the new CIO’s. Also the composition of the physician input has to change immediately so that the EMR is patient centric and usable from the physician perspective.

Second this is going to take years to implement and especially in mental health we need a portable EMR solution that works with the DOD, the VA and the private sector. No one at the VA got back to me on what the Apple project can and can not do in terms of solving this problem.

Sent from my iPad
Bruce Moskowitz M.D.

From: Short, John (VACO)
Sent: 28 Feb 2018 12:19:37 -0800
To: Blackburn, Scott R.
Cc: Windom, John H.;Zenooz, Ashwini
Subject: RE: Open API - it is CLOUD + language + (b) (6) Update All 4 Answers
Importance: High

1. Voice Recognition?

The EHRM platform includes Enterprise Dragon Nuance. VHA already deployed the enterprise version which maintains people voice print and the Clinical Staff say it works very well. Cerner will port over the voice prints so the clinicians that use it today will be able to use it tomorrow in Cerner without any rework. The Clinician can use the dictation and other features with voice recognition.

2. How will all entered lab data, from any source, be available on a graph?

Graphs are generally available in 2 spots. 1. Workflow MPage lab Component and 2. Results review flowsheet. When outside labs are mapped we would use the same names as internal and then they would appear on the same line. Even if they are not exactly named the same the results review flowsheet allows for 2 different lab values to be graphed together.

2. Can Cerner's system catching test duplication, over utilization and medication duplication/errors at time of ordering instead of after the fact?

Yes. All tests are configured to have a time where an alert is issued based on parameters we configure and can flex by venue. Over utilization is generally avoided with real time alerting but we would have to use some mechanism to monitor, via report, usually. The medication duplication is configured similarly to test and parameters determine how the system acts. Tall man lettering reduces errors in look alike, sound alike meds, and finally in instances we identify unique instances of errors we can configure rules to catch those. For meds all allergy checking, dupes, dose range checks, and interactions are checked at time of ordering.

**Also, at DoD Cerner has already prevented over 15,000 duplicate test at the three sites.

3. Does Cerner have streamlined SOAP notes?

Yes. These are provided and will be further configured under VA direction to meet VA clinician needs.

From: Blackburn, Scott R.
Sent: Wednesday, February 28, 2018 2:33 PM
To: Windom, John H.; Short, John (VACO); Zenooz, Ashwini
Subject: FW: [EXTERNAL] Re: Open API - it is CLOUD + language + Rasu

Where did we land on the 4 topics below? I want to make sure they understand that you guys did a hell of a job so we have a warm and fuzzy that we are getting the best deal for Veterans.

From: Bruce Moskowitz [mailto:(b) (6)@mac.com]
Sent: Wednesday, February 28, 2018 1:13 PM

To: Blackburn, Scott R.
Cc: DJS; Marc Sherman; O'Rourke, Peter M.; IP; (b) (6) @gmail.com
Subject: Re: [EXTERNAL] Re: Open API - it is CLOUD + language + Rasu

Thank you my five CIO's had looked forward to tar and feathering me if the cloud is not done correctly!

The other issues are:

Voice Recognition

All entering lab data on a graph from any source

Catching test duplication, over utilization and medication duplication/errors at time of ordering not after the fact

Streamlined SOAP notes

Sent from my iPad
Bruce Moskowitz M.D.

On Feb 28, 2018, at 12:52 PM, Blackburn, Scott R. (b) (6) @va.gov> wrote:

Bruce – this is incredibly helpful. Thank you very much. I had my team dig into this this more this morning. What you have stated below is clearly the intent (we need everything to be OPEN and absolutely do not want to inadvertently create vendor lock); we've also gone back this mornign to confirm with Cerner that this is their intent. We are going to alter the language to make this more clear. We don't anticipate any pushback. A few things I learned this morning...

- The contract does NOT lock us in to Amazon Web Services (AWS). Rather any cloud provider or applications that meet security and privacy requirements to protect Veteran data can interface with Open APIs or push data to the VA/Cerner system.
- Currently 3 cloud providers meet the Government security requirements – AWS, Azure/Microsoft and CSRA. There are several others that we expect to come on board soon including Google and VirtuStream/Dell. At VA, we use both AWS and Azure right now. Again, the goal here is to create open environment as long as the provider meets certain standards (these standards are dictated by GSA, not VA).
- (b) (4)

- DoD is excited to follow our lead on all of this. I spent the morning at the Pentagon with the DoD CIO/team. This will help not just Veterans, but servicemembers still in uniform.

Thanks again for the feedback and support. We are going to make sure this is crystal clear.

Scott

From: Bruce Moskowitz [mailto:(b) (6)@mac.com]
Sent: Tuesday, February 27, 2018 9:29 PM
To: Blackburn, Scott R.
Cc: DJS; Marc Sherman; O'Rourke, Peter M.; IP; (b) (6)@gmail.com
Subject: [EXTERNAL] Re: Open API - it is CLOUD + language + (b) (6)

Apologize for the wording instead of their commercial cloud a cloud based system open
To all entities and instead of Amazon it should be all platforms working to accelerate health care initiatives

Sent from my iPad
Bruce Moskowitz M.D.

On Feb 27, 2018, at 9:20 PM, Bruce Moskowitz
<(b) (6)@mac.com> wrote:

To clarify further it states their commercial cloud instead a commercial cloud
Open to all entities and of equal importance an open platform to all not just amazon but to all

Working on

Sent from my iPad
Bruce Moskowitz M.D.

On Feb 27, 2018, at 8:20 PM, Bruce Moskowitz
<(b) (6)@mac.com> wrote:

This is a problem it should say open cloud to all entities not commercial cloud

Second it should be open platform and not just Amazon to all entries working on health care platforms.

Sent from my iPhone

On Feb 27, 2018, at 6:09 PM, Blackburn, Scott R. <(b) (6)@va.gov> wrote:

David/Bruce/Marc – here are a few updates:

#1) (b) (6) is all in as far as starting to help right away. I just got off the phone with him. He has UPMC commitments rest of this week and is Chairman of HiMSS Innovation committee (so we will all be at HiMSS together next week). However if he needs to come to Washington this week for something, he will find a way to do it (and we will use invitation travel to pay for it). He is willing to start engaging right away to help us. He said he doesn't have to wait for

the IPA
paperwork to
come through
for him to help.
I've attached
(b) (6) CV in
case you need
it.

#2) **The APIs
are cloud
based.** Here is
the response
from our
Technical lead...

- The
Open
APIs
that
VA has
access
to
from
Cerner
reside
in their
Comm
ercial
Cloud
enviro
nment.
This
enviro
nment
is
design
ed to
scale
to
accom
modat
e
Cerner
's
entire

remote
hosted
customer
base.

- In a recent press release Cerner and Amazon announced that they would be working together in cooperation to accelerate Health Care Innovations.

#3) Below is the IP language

that we negotiated.

This is what caused (b) (6)

(b) (6) (one of the experts on our MITRE panel) to jump out of his chair

last week. He claims this is the holy grail that no other healthcare system has been able to get from either Cerner or Epic. (b) (6) claims that as a result of what we've negotiated below, that other healthcare systems will be willing to join us in the attached pledge (shall we decide to go forward with it) and we could do this next week at HiMSS. When I spoke to (b) (6) he told me (b) (6) had already called him about this and that UPMC would be willing to sign this pledge.

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From: Sandoval, Camilo J.
Sent: 6 Feb 2018 22:24:13 +0000
To: Sandoval, Camilo J.; Blackburn, Scott R.; Windom, John H.; Zenooz, Ashwini; Short, John (VACO)
Cc: (b) (6) (b) (6)
Subject: RE: EHR Meeting
Attachments: EHR Discussion - (8-Feb-2018).docx, WhatThisComputerNeeds.pdf

Marc and Bruce requested that we read attachments prior to our call

Agenda

1. **Marc Sherman** – 5 minutes to layout areas of interest
2. **Bruce Moskowitz** – 5 minutes to layout areas of interest
3. Group discussion around attachments
4. **John Window** – 5 minutes closing comments



Thank you
Camilo

Camilo Sandoval
Senior Advisor to Under Secretary
Veterans Health Administration
U.S. Department of Veterans Affairs
Washington, D.C.
M: (b) (6)
O: (b) (6)

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| 1 | Topic Area | Humanism and Artificial Intelligence (Attachment – What this Computer Needs.pdf) | |
| | Summary | <p>Clinical Documentation and Electronic Systems: burnout & redundancy</p> <ul style="list-style-type: none"> • Dissatisfaction with design & cumbersome processes of electronic documentation • Loss of social rituals b/w physicians & nurses, healthcare workers etc. • Redundancy of notes & order entry; Mundane clinical documentation requirements • Overall mix of clinical vs. nonclinical activities • Concerns with AI/ML driven automation | <p>Additional Thoughts (Big Picture)</p> <ul style="list-style-type: none"> • Policy & Predictive Policing (Rule Engine) • How could AI help fix some of the problems created by technology & other potential advantages • Streamlining administrative burden and patient support • Data mining possibilities (from therapy to payer landscape) • Clinical Decision Support Systems • System and workflow design • Training around using models developed by Machine Learning • Other unanticipated consequences |

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| 2 | Topic Area | EHR OPTIMIZATION: Relationship between clinical documentation, the electronic systems that support documentation, and clinician burnout (Below) | |
| | Summary | <ul style="list-style-type: none"> • A range of factors drives clinician burnout, including workload, time pressure, clerical burden, and professional isolation . Clerical burden, especially documentation of care and order entry, is a major driver of clinician burnout. Recent studies have shown that physicians spend as much as 50 percent of their time completing clinical documentation . Nurses similarly spend up to half their time fulfilling clinical documentation requirements and data entry for other demands such as quality reporting and meeting accreditation standards. In the outpatient setting, patients will often describe clinical team members going through mundane questioning and computer documentation, often duplicative, and spending little time making eye contact and talking to them, or performing physical examination. With the exception of improving medication safety, nurses and other clinicians report dissatisfaction with the design and cumbersome processes of electronic documentation. Many clinicians feel they are compelled to first satisfy the demands of documentation in the clinical record. After caring for patients, many clinicians devote significant amounts of time to nonclinical activities, which often carry on into afterhours. This paper explores the relationship between clinical documentation, the electronic systems that support documentation, and clinician burnout, and provides recommendations for addressing these issues. | |

Clinical Documentation and Coding Requirements

Background

- Clinician well-being and fulfillment in work is critical for patient safety and health system function. Fulfillment in work has been ascribed to **three factors**: (1) mastery: competency and proficiency in the work to be done, (2) autonomy: having some element of influence over the way work is performed, and (3) purpose: a connection to filling a societal need in an environment where one's profession is honored and valued. The current epidemic of clinician burnout is related to these factors. Clinicians increasingly feel burdened by administrative tasks that seem to not add value to patient care and are unrelated to the reasons they chose their professions. The disconnect between one's calling and one's daily work contributes to distress, and can lead to alienation, isolation, depersonalization, cynicism, emotional exhaustion, and burnout.
- Clinical documentation began when physicians recorded case reports of a patient's course of care. These case reports evolved into records used in teaching others the practice of medicine. Although the original impetus for clinical documentation was to tell a patient's story and describe that person's treatment and progress, recent history has seen an increasing shift toward tailoring documentation to fulfill billing requirements. **Several major forces led to changes in clinical documentation. First**, as a component of **public funding** (Medicare and Medicaid), documentation of services became a requirement for payment, because federal payers needed to ensure that taxpayer funds were appropriately spent and beneficiaries received medically necessary services. Additionally, payers had to guard against fraud. However, payers are requiring increasingly detailed documentation to provide reimbursement. Similarly, **private payers** have increased administrative oversight in the form of administrative preapproval processes and **very specific documentation criteria to reimburse** for drugs and procedures. These requests encourage the generation of boilerplate text, templates, check boxes, and other documentation tools that fulfill billing purposes but can produce documentation of limited clinical value and also add time to the documentation process. **Movement away from detailed documentation of each care process to a focus on rewarding patient outcome is potentially beneficial. However, the management of the transition and the specified documentation approaches for outcome measurement will directly affect the potential benefit.**
- The **second factor** influencing the change in clinical documentation was computerization of the patient medical/health record. Early systems fulfilled the need to collect data from different sources (pharmacy, laboratory, transcription). These electronic health records (EHRs) were often used to support billing and collections, and not necessarily clinical needs and workflow. Next, computerized provider order entry systems (CPOE) were introduced that use described guidelines for care and checklists in the form of electronic order sets. CPOE offers advantages over traditional paper-based order-writing systems, such as improved accuracy in ordering services and the avoidance of problems associated with handwriting legibility. However, **CPOE interrupts the traditional workflow of order entry. The way electronic order sets conceptualize workflow often does not align with actual practice.** For example, ICU physicians are often alerted to emergent needs for medication orders by the bedside nurse, who monitors the patient closely. Nurses were previously able to write verbal orders from the physician, with physician signature later, sometimes after administration of the medication. In contrast, CPOE workflow requires the physician to enter the order as well as sign it. **Further attention to the design and implementation of CPOE is necessary to realize its full potential benefits.**

(Conti...) Clinical Documentation and Coding Requirements

Background

- The **third factor** that changed workflow was the introduction of patient confidentiality rules and regulations within the Health Insurance Portability and Accountability Act (HIPAA). Although HIPAA introduced important privacy protections for patients, the law also led health systems to limit the use of tools such as the problem-oriented checklist, names of patients written on the rooms or central locations, and many other basic forms of communication.
- **A continued shortcoming of modern systems is adherence to tedious detailed documentation requirements to satisfy payers and regulations.** We have yet to design systems to support the premise that clinical documentation exists to support the care clinicians deliver to patients, and other functions should be a secondary goal. By creating a specific task out of every element of information, even with the use of checklists and reporting by exception, clinicians’ time is adversely affected. **In part, this is perpetuated by the myth that “if it isn’t documented, it wasn’t done .”** Much of this has been driven by linking documentation to payment. This demand has perpetuated the perception by clinicians that payers do not fully trust them. The perceived over documentation of process fuels resentment that payers are supplanting the clinician’s professional judgment regarding the care that needs to be provided.
- Centers for Medicare and Medicaid Services’ Evaluation and Management (E/M) coding guidelines offer a good example of the challenges in completion of document requirements. E/M codes require attestation of various elements of the patient’s history, including review of 14 systems (e.g., respiratory) and physical examination to support the level of payment requested. There are five levels of payment, which are determined by a tabular interplay of four levels of medical history, four levels of physical examination, and four levels of medical decision making . This **results in abundantly detailed documentation, which is necessary for billing purposes, and, with the exception of medical decision making, is often clinically irrelevant.** The EHR compounds this problem by facilitating the collection of many redundant or irrelevant details. Another challenge is that some institutions over interpret E/M coding guidelines and require that only physicians can directly enter elements of the History of Present Illness (HPI). In addition, limitations are sometimes placed on clinically trained staff (medical assistants or nurses) such that they must sign in and out of roles between clerical and clinical tasks, and that the HPI drafted by an MA or nurse during rooming does not count for billing.

Clinical Information Systems

Background

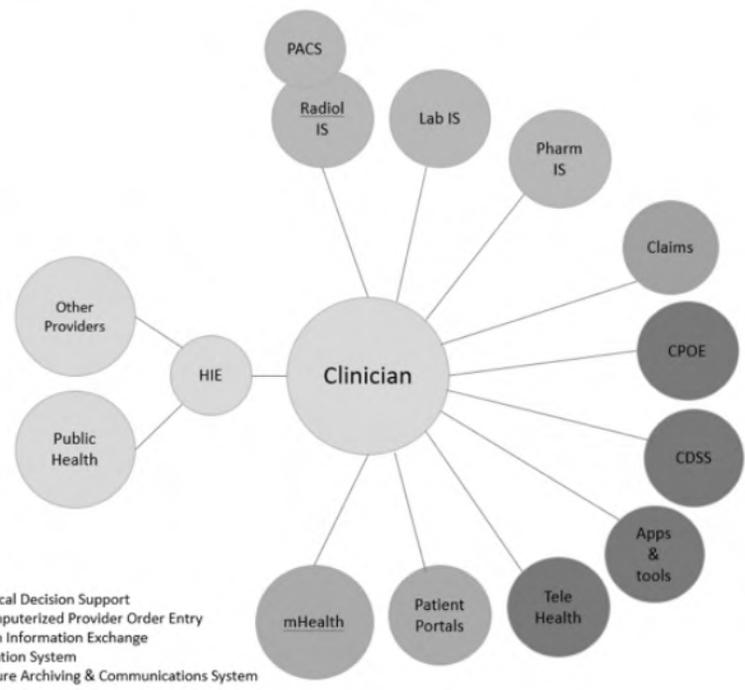
- EHRs provide a nexus for information input and retrieval among complex health care systems and environments. However, there are challenges in the use of EHRs that affect clinician burnout. **The Health Information Technology for Economic and Clinical Health (HITECH) Act of 2009** provided the financial support and incentives to accelerate the adoption of computerized patient records. Through the **Meaningful Use (MU) Program** of HITECH, eligible providers and organizations could garner significant funding to offset the costs of implementing EHRs with the intention of optimally using the data to improve the patient experience, as well as quality and cost of care. The rapid pace of implementing systems that were available on the market at the time discouraged many clinicians and organizations from taking the time to redesign workflows, or insist on design changes in EHR systems that would better support clinical care. **What was not envisioned was that the electronic systems would exact more benefits for those other than patients and clinicians—e.g., automated claims for third-party payers.**
- **Currently, most sites of clinical care use EHRs, which include electronic prescribing (pharmacy information systems) and CPOE. These systems often connect to clinical decision support systems (CDSS), laboratory, radiology, telehealth, mobile health, patient portals, and health information exchange systems.** CDSS are designed to aid clinical decision making by providing patient-specific assessments or recommendations. **When MU incentives rapidly advanced the implementation of EHR systems, it brought along the breadth of features listed above. Also for health care providers, MU brought enhanced use of structured data elements, and significant changes in workflow.** Although some positive process and outcomes improvements have been reported with the use of CPOE and CDSS systems, the overall results are mixed. **There is evidence for enhanced quality and safety, but there is also risk that distractions caused by associated clerical burden can contribute to safety issues.** Physicians who do use CPOE experience 30 percent higher rates of burnout than those who do not. Several studies document that physicians and residents spend 50 percent or more of their time using EHR systems for documentation, ordering tests, reviewing results, and communicating with patients or team members. Furthermore, nurses also spend up to 50 percent of their time on documentation.
- From the early inception of electronic documentation, appropriate mechanisms to encourage direct clinician input have proved to be a challenge. CDSS often provide alerts (such as drug interactions and reminders) to health care providers as they use the EHR. Efforts of health systems to improve quality and performance along with MU requirements have led to widespread use of CDSS and alerts. **However, a high percentage of alerts are routinely bypassed . Another feature of EHR systems, inbox notifications, also consumes clinician time—a recent study estimated that physicians spend an average of 67 minutes per day processing these notifications. As a result, the utility of such notifications should be optimized and warrants further investigation.**
- Personal health records that store health data input by the consumer or from other data sources have been implemented through a variety of models. They are most frequently available as tethered patient portals in EHRs, but freestanding products are also offered. However, adoption of patient health records has been slow, and there are recognized barriers to their use. Increasingly, mobile health data are available through personal mobile health devices and phones that can measure heart rate, steps, oxygen saturation, and other data. **Integration and use of this data can be important to patient management, and plays a growing role in the clinical record.**

(Conti...) Clinical Information Systems

Background

- Patients and clinicians benefit when essential relevant health information is available at the point of care. For this to occur, health information must be shared across systems. **Health information exchange (HIE) efforts are focused on the problem of sharing data between EHR systems.** Although progress is being made, barriers remain with interoperability between EHRs and other health information tools and systems. Also, **there are concerns that HIE is impeded by EHR products because information sharing between systems can be challenging.** A principal challenge in HIE is the **limited standardized formatting of data and a lack of common framework.** Although it is common in other industries such as banking and travel, this lack of easy exchange of medical data constrains the overarching promise of EHRs.
- The digital environment in health care has irrevocably changed how clinicians deliver and document care. The promise of technology to deliver on improving care and outcomes, as well as enabling workflow and reducing clinician workload, has yet to be fully realized. **The National Academy of Medicine (NAM) recognized the impending challenges more than two decades ago when it formed the Committee on Improving the Patient Record in Response to Increasing Functional Requirements and Technological Advances.** In their report, the committee acknowledged both the benefits and the challenges of the rapid expansion of information technology in health care. As health care continues to become increasingly complex and the pace of technological change accelerates, the need to revisit the digital environment in health care has never been more pressing.

Figure 1 | Clinician EHR Systems/Tools | Source: Ommaya et al., "Care-Centered Clinical Documentation in the Digital Environment: Solutions to Alleviate Burnout," National Academy of Medicine.



System Challenges in the Current Environment

Background

- **Clinicians must spend increasing portions of their work time on nonclinical activities.** This leads to a lack of control over their workday, a loss of collegiality while working in isolation, and interference with the patient-physician/clinician relationship as a computer screen creates a physical and psychological barrier between them. EHRs have spawned a new MD exercise known colloquially as “**Pajama Time,**” with mandated documentation carrying on into afterhours because of the volume of required computer tasks and the ability to complete these tasks remotely.
- Because of the aforementioned payment guidelines and the ease with which digital documentation allows “copying and pasting” or just adding to prior entries, the **EHR has become a bloated repository of repetitive and redundant information.** Recent studies indicate that, in a variety of settings, clinicians routinely use copy and paste or copy-forward and that most clinical notes are the result of copied or imported text. The patient’s story is further lost in the fog of self-populated content that adds pages but little purpose to the notes.
- Another feature that an EHR has that a paper chart lacks is the ability to use templates and menus. Depending on the use, these features can either speed up or slow down use but **may not necessarily improve content.** Forced characterization by selecting choices from a “pull-down” list or prewritten text prevents telling the story in the patient’s own words in as much detail as possible. Some health organizations require documentation through templates (e.g., drop-down boxes) to facilitate billing and auditing. Optimization of template design may help alleviate some of these issues.

The Challenge of Multiple Stakeholder Requirements Driving Clinical Documentation

Background

- The espoused advantages of electronic health records are to help provide higher-quality and safer care along with greater efficiency to meet business goals. **Some of the potential advantages are widely accepted:** timely access to patient records, legible documentation, more reliable prescribing, reduction of some error-prone processes, enhanced privacy and security of data, and the potential to share information electronically with patients and other care providers. **The advantages of other capabilities are less certain and have yet to be realized by the majority of patients and clinicians. These advantages include better-coordinated and efficient care, enhanced clinician and team communication, complete documentation for streamlined coding and billing, improved productivity and efficiency leading to better work-life balance for clinicians, and reduced costs with less “paperwork” as well as elimination of duplicate diagnostics.**
- **Given the investment and desire to optimize the use of EHR systems, practices and organizations rely on the broadest possible application of its use to service a diverse array of stakeholders, including but not limited to patients, clinicians, institutions, payers (public and private), vendors, research bodies, registries, regulatory bodies and regulatory counsel, and policy makers.** These stakeholders have great expectations that may also create competing interests. For example, documentation methods that capture data in a structured format can help facilitate billing or data analysis for quality improvement. However, clinicians may prefer free-form methods that provide greater flexibility and may be faster than structured templates in certain instances (though the use of structured formats and free-form methods for clinical documentation are not mutually exclusive). That being said, all stakeholders rely on data for critical decision making as well as advancing business decisions.
- The fundamental functions driving clinical-documentation demands include traditional recording of care, automated transactions, and approaches to enable greater quality, efficiency, and informed decision making as summarized in Table 1.
- Source: Ommaya et al., “Care-Centered Clinical Documentation in the Digital Environment: Solutions to Alleviate Burnout,” National Academy of Medicine. | Note: [a] Principal elements that should be captured by the clinician during the patient encounter and recorded in clinical documentation.

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| 9 | Topic Area | <h2>Leveraging Digital Health to Support Rational Clinical Documentation</h2> |
| | Background | <ul style="list-style-type: none"> Up to 80 percent of information about an individual in a medical record is textual. Use of free text in clinical notes is an important part of medical documentation. It allows the clinician to go beyond structured data entry to record a more holistic view of an individual. In addition, under the Assessment and Plan sections of a progress note, clinicians describe their current assessment, along with their rationale, and plans for next steps in diagnosis or treatment. Reimagining the future of digital health information technology to support clinicians, patients, and person-centered care relies on reevaluating the current data elements collected and entries recorded in EHRs. Simplifying the breadth and depth of documentation for all clinicians should be predicated on evidence that the documentation is justified. |
| 10 | Topic Area | <h2>Providing Automated Review of Previous Clinical Information</h2> |
| | Background | <ul style="list-style-type: none"> With the introduction of EHRs, and their text-productivity tools (e.g., templates, macros, and copy-paste functionality), clinical notes have become bloated and difficult to read. This forces the next clinician to go through a process of foraging to uncover important elements of past notes. By applying specially designed natural language processing algorithms, computers are now poised to read clinical text and glean important insights from it. Natural language processing (NLP) tools have been shown to reliably extract data from clinical notes with high levels of precision in research settings for specific tasks. Current use of NLP also allows clinicians to dictate a clinical experience and can provide structured data without the use of a template. In a study published in the Journal of Medical Internet Research, use of dictation plus NLP reduced documentation time while maintaining documentation quality. Future tools that facilitate the presentation of summary insights from the past in a succinct fashion would save clinicians time and prevent important information from falling through the cracks. |
| 11 | Topic Area | <h2>Addressing Copy-Paste Documentation</h2> |
| | Background | <ul style="list-style-type: none"> Tools to help recognize the original source of text passages would help the clinician reader assess the credibility and veracity of the text, as well as know which findings are new or changed. Microsoft's Track Changes is an example of a common editing tool that helps the reader understand the provenance of a text passage. Administrative changes, such as documentation assistance and empowered teamwork that direct data entry tasks away from clinicians, will reduce the pressure to copy and paste or copy-forward. Copy and paste can be helpful and time saving, but it must be used judiciously. Organizations have identified practices to promote safe use of copy and paste [41]. In addition, regulatory changes that relieve clinicians of the need to document low-value text—e.g., each element of a normal physical exam, a complete review of systems, test results that are already present elsewhere in the record, and so on—will reduce the need for copy and paste. |

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| 12 | Topic Area | <h2>Transitioning to Payment Reform</h2> |
| | Background | <ul style="list-style-type: none"> • One of the drivers leading to excessive and duplicative text that is so prevalent in today’s clinical documentation is the need to comply with billing rules. Payment-driven documentation criteria are artifacts of the fee-for-service environment that has dominated American medicine for decades. As the United States moves from fee-for-transactions to value-based purchasing, policy makers should reexamine the need for documentation that serves billing needs and replace it with documentation that serves care. Ultimately, returning to the origins of clinical documentation—to communicate and facilitate care—would simplify documentation, reduce the effort dedicated to producing it, and encourage documentation of only those features that are most salient and necessary to continuing care. |
| 13 | Topic Area | <h2>Applying User-Centered Design Principles</h2> |
| | Background | <ul style="list-style-type: none"> • As health care practitioners transition from handwritten documents in paper medical records to electronically captured structured and unstructured documentation, the health care enterprise should take the opportunity to fundamentally reexamine the methods used to enter and retrieve essential care information. Instead of computerizing the paper-based methods of entering and retrieving information, <u>design-thinking</u> methods should be employed to elucidate an efficient method for capturing information and an efficient and effective way of retrieving the information needed to support effective decision making. • The transition from paper-based record keeping to computer-based information management presents a great opportunity to fundamentally relook at the most effective way of capturing and using rich information about an individual to make the best possible decisions about health. A goal of this effort should be to improve targeting of alerts and reduce disruption in clinician workflow. In addition, the inclusion of social and behavioral data that helps drive patient-focused treatment recommendations and the incorporation of patient goals would be beneficial. Standards for automated data integration from medical monitoring devices and other IT systems will also decrease clinician burden of manual data entry [42]. A truly advanced EHR system should provide patient-specific outcome and experience comparisons based on the treated population within the practice [43]. <u>Machine-learning</u> approaches could add to existing CDSS and generate accurate differential diagnoses and determine high-value evaluation approaches [44]. Machine-learning tools will likely assist in error detection and could improve diagnostic accuracy. Importantly, efforts to improve health IT systems must address usability or the “effectiveness, efficiency and satisfaction with which specific users can achieve a specific set of tasks in a particular environment [45].” A schema of the future state is presented in Figure 2. • <u>Figure 2 The Future State of a Lean, Streamlined, User-Designed System Source: Ommaya et al., “Care-Centered Clinical Documentation in the Digital Environment: Solutions to Alleviate Burnout,” National Academy of Medicine.</u> |

Recommendations

- To say the evolution of clinical documentation in the digital environment has become merely a source of dissatisfaction for clinicians grossly underestimates its effect on burnout. Clinicians are calling for significant redesign of clinical documentation to restore autonomy and purpose to this aspect of work, eliminate the perceived large number of actions that do not add value, and return time to clinicians for essential care activities. **We recognize that the primary drivers for current capabilities in EHRs include regulatory requirements, and documentation to support coding and billing.** As noted in this paper, however, **the needs of clinicians and patients should be emphasized more directly and better incorporated as the primary drivers.** Clinicians spend much of their time focused on documentation and related coding issues. This use of highly specialized clinical knowledge seems to be a misapplication of resources. Meanwhile, the patients have been left in their exam rooms or hospital beds wondering if all the activity going on is helping to address their needs.
- **It is essential that clinical documentation be adequately detailed so that patients' diagnoses and care can be understood by clinical colleagues and contribute constructively to team-based care.** With the current system, we have created records that are dense, where the relevant information is challenging to find, and gaps in the consistency of what is documented are apparent. Clinicians have learned to simply jump through the hoops of adequate documentation for reimbursement. Physicians are copying and pasting previous notes, changing a few details, and potentially contributing to the increasing volume of unnecessary and irrelevant data.
- **Recognizing that time is a limited resource for all clinicians, only essential primary data entry should be required of clinicians to support the care of a patient.** The care team needs to control what documentation demands their attention with optimal capability to capture information at the point of care. Secondary uses, such as billing, should be satisfied through machine-captured data, which might be addressed in EHR certification criteria. The technology also needs to be enhanced to address the tension between structured versus unstructured documentation.
- Given the time that clinicians spend with inbox management, **organizations should ensure that messages indicate clear action targeted to specific audiences.** Having medical assistants or other support personnel support documentation (e.g., inbox management and entering patient data into the EHR) improves clinician satisfaction and reduces burnout. However, **the potential for unintended consequences in data accuracy should be considered and further evaluated.** Additionally, providing time in workflows during the workday to complete EHR documentation tasks enhances clinician satisfaction. Although not addressing the underlying documentation challenges, scribes or team-support mechanisms for documentation enhance physician satisfaction, increase time with patients, and advance charting efficiency [47].
- **As the country transitions from pay-for-transactions to pay-for-value, the focus of documentation should return to that which supports high-quality care delivery and team communication.** The original 1995 and 1997 guidelines were developed to ensure that fee-for-service reimbursement was justified. It would also be beneficial for CMS to deemphasize documentation requirements as a condition of payment for health care services. Deemphasizing (and phasing out over time) the granular

documentation requirements would not only decrease the administrative work that burdens clinicians, but also improve the quality and

- meaningfulness of the clinical documents. CMS should clarify that elements of the HPI drafted by an assistant (MA or nurse) during rooming, and subsequently confirmed with the patient by the provider, as indicated by the provider in the medical record, should count for reimbursement.
- Focus on further development of health informatics capability that allows clinicians to view and understand the previous medical, health, and social history of the patient, including detail regarding diagnostic, surgical, procedure, and care plan information, will improve current EHR workflow. Ideally, richer imaging, video, and other sources of information will be included. In this system, medical history will be informed and built on the input of various treating and consulting clinicians with input and review by the patient.
- As a best practice, clinicians should be engaged in development, testing, optimization, and evaluation of new EHR features such as clinical decision support, order sets, and templates. EHR training is often provided in a limited number of sessions as an onboarding component. However, advanced longitudinal training and support of clinical staff improves self-assessment of competency [48,49].
- The authors recommend that an authoritative body, such as the National Academy of Medicine, initiate a study focused on redesigning clinical documentation suited to the modern digital age with a primary focus on informing clinical management and improving patient outcomes and health. The study should focus on the needs of clinicians and patients in support of succinct documentation and use of informatics tools, which can facilitate and streamline workflow. See Box 1

Conclusion

As a result of new and emerging technology and changing consumer expectations, health care will inevitably transition to a more person- and family-centric health system requiring the interoperability of a broad array of health solutions from traditional resources, including clinicians and hospitals, to the internet of things. As we enter an era of telehealth and digital applications, we are just beginning to understand the effect of new technologies, such as machine learning and blockchain solutions, on extending the value of health care and better aligning it with the social, genetic, environmental, and behavioral determinants of health [50]. Simultaneously, payment reform efforts are underway to support this change with new models of value-based payment that reward improved personalized health outcomes. As we study opportunities to address the existing challenges of clinical documentation, we must do so with the understanding that health care is at an inflection point and will undergo unprecedented change in the way care is delivered and paid for in the coming years. Florence Nightingale was prophetic in her 1863 critique of hospital documentation that described her difficulty in seeking information on patient care and hospital conditions, claiming, "I have applied everywhere for information, but in scarcely an instance have I been able to find hospital records fit for any purpose of comparison [51]." Physicians 100 years ago brought forth the idea of adequate documentation to establish their professional responsibilities to their patients and to themselves. In the present environment, clinicians have lost control of this responsibility, and it is having deleterious effects on the authenticity of their work, their sense of autonomy, patient outcomes, and the functions of the clinical environment. It is time to rethink the patient record

and how it can best be used to improve person-centered care.

VIEWPOINT

What This Computer Needs Is a Physician Humanism and Artificial Intelligence

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The nationwide implementation of electronic medical records (EMRs) resulted in many unanticipated consequences, even as these systems enabled most of a patient's data to be gathered in one place and made those data readily accessible to clinicians caring for that patient. The redundancy of the notes, the burden of alerts, and the overflowing inbox has led to the "4000 keystroke a day" problem¹ and has contributed to, and perhaps even accelerated, physician reports of symptoms of burnout. Even though the EMR may serve as an efficient administrative business and billing tool, and even as a powerful research warehouse for clinical data, most EMRs serve their front-line users quite poorly. The unanticipated consequences include the loss of important social rituals (between physicians and between physicians and nurses and other health care workers) around the chart rack and in the radiology suite, where all specialties converged to discuss patients.

The lessons learned with the EMR should serve as a guide as artificial intelligence and machine learning are developed to help process and creatively use the vast amounts of data being generated in the health care system. Outside of medicine, the use of artificial

The 2 cultures—computer and the physician—must work together.

intelligence in predictive policing, bail decisions, and credit scoring has shown that artificial intelligence can actually exaggerate racial and other bias. For example, a program used for risk assessment by US courts mistakenly flagged black prisoners as likely to offend at twice the rate it mistakenly flagged white prisoners.²

Similar concerns around artificial intelligence predictive models in health care have been discussed: clearly, in the 3-step process of selecting a dataset, creating an appropriate predictive model, and evaluating and refining the model, there is nothing more critical than the data. Bad data (such as from the EMR) can be amplified into worse models. For example, a model might classify patients with a history of asthma who present with pneumonia as having a lower risk of mortality than those with pneumonia alone,³ not registering the context that this is an artifact of clinicians admitting and treating such patients earlier and more aggressively. Since machine learning presents no human interface and cannot be interrogated, even if its predictions are extraordinarily accurate, some clinicians are likely to view the "black box" with suspicion.

The missing piece in the dialectic around artificial intelligence and machine learning in health care is

understanding the key step of separating prediction from action and recommendation. Such separation of prediction from action and recommendation requires a change in how clinicians think about using models developed using machine learning. In 2001, the statistician Breiman⁴ suggested the need to move away from the culture of assuming that models that are not causal and cannot explain the underlying process are useless. Instead, clinicians should seek a partnership in which the machine predicts (at a demonstrably higher accuracy), and the human explains and decides on action. The same sentiment was expressed by Califf and Rosati as early as 1981 in an editorial on predictive risk factors emerging from a computer database on exercise testing for coronary artery disease: "Proper interpretation and use of computerized data will depend as much on wise doctors as any other source of data in the past."⁵

The 2 cultures—computer and the physician—must work together. For example, clinicians are biased toward optimistic prediction, often overestimating life expectancy by a factor of 5, while predictive models trained from vast amounts of data do better; using these well-calibrated probability estimates of an outcome, clinicians can then can act appropriately for patients at the highest risk.⁶ The lead time a predictive model can offer to allow for an alternative action matters a great deal. Well-calibrated levels of risk for each outcome, and the timely execution of an alternative action, are needed for a model to be useful. In short, a black-box model can lead physicians to good decisions but only if they keep human intelligence in the loop, bringing in the societal, clinical, and personal context. Additionally, the unique human brain and clinical training can generate new ideas, see new applications and uses of artificial intelligence and machine learning, and connect these technologies to the humanities and the social sciences in ways that current computers do not.

The ability of artificial intelligence to automate and help in the clerical functions (such as servicing the EMR) that now take up so much of a clinician's time would also be welcome. Although not currently accurate enough, automated charting using speech recognition during a patient visit would be valuable and could free clinicians to return to facing the patient rather than spending almost twice as much time on the "iPatient"—the patient file in the EMR.⁷ More time for human-to-patient interaction might both improve care and allow physicians to record, and accurately register, more phenotypes⁸ and more nuance. Better diagnosis, and diagnostic algorithms providing more

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Verghese, MD,
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University School of
Medicine, 300 Pasteur
Dr, S102, Stanford, CA
94305-5110 (abrahamv
@stanford.edu).

accurate differential diagnoses, might reshape the traditional CPC (clinical problem solving) exercise, just as the development of imaging modalities and sophisticated laboratory testing made the autopsy less relevant.

As with the EMR, there are legitimate concerns that artificial intelligence applications might jeopardize critical social interactions between colleagues and with the patient, affecting the lived experiences of both groups. But concerns about physician "unemployment" and "de-skilling" are overblown.⁹ In the same manner that automated blood pressure measurement and automated blood cell counts freed clinicians from some tasks, artificial intelligence could

bring back meaning and purpose in the practice of medicine while providing new levels of efficiency and accuracy. Physicians must proactively guide, oversee, and monitor the adoption of artificial intelligence as a partner in patient care.

In the care of the sick, there is a key function played by physicians, referred to by Tinsley Harrison as the "priestly function of the physician." Human intelligence working with artificial intelligence—a well-informed, empathetic clinician armed with good predictive tools and unburdened from clerical drudgery—can bring physicians closer to fulfilling Peabody's maxim that the secret of care is in "caring for the patient."

ARTICLE INFORMATION

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Conflict of Interest Disclosures: All authors have completed and submitted the ICMJE Form for Disclosure of Potential Conflicts of Interest. Dr Verghese reported receiving royalties from Random House and Scribner; receiving speakers fees from Leigh Bureau; and receiving fees for serving on the Gilead Global Access Advisory Board. Dr Harrington reported receiving research grants outside the topic area from Merck, CSL Behring, GlaxoSmithKline, Regado, Sanofi-Aventis, AstraZeneca, Portola, Janssen, Bristol Myers Squibb, Novartis, and The Medicines Company; serving as a consultant for Amgen, Adverse Events, Bayer, Element Science, Gilead, MyoKardia, Merck, The Medicines Company, and WebMD; and serving on the boards of directors of Signal Path, Scanadu, the American Heart Association, and Stanford Healthcare. Dr Shah reported no disclosures.

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From: Windom, John H.
Sent: 14 Nov 2017 19:44:03 +0000
To: (b) (6)
Subject: FW: [EXTERNAL] FW: VA MEETING close hold DO NOT SHARE

My note to Blackburn who sent me the same note:

Ok. Thanks. Not sure of the validity of any of his comments but will investigate. I could prepare a list of things Cerner has that Epic does not have that would serve no purpose. What Cerner does have is interoperability with DOD and an overall better product. I am not going to be drawn into the cherry picking game that is being done with the Cerner product. Please send that list of Epic overruns that I sent you last week to this person.

Thx
John

Thank you.
John

Sent with Good (www.good.com)

From: (b) (6)
Sent: Tuesday, November 14, 2017 11:27:55 AM
To: Windom, John H.
Subject: [EXTERNAL] FW: VA MEETING close hold DO NOT SHARE

John

Don't want you to be blindsided but these are two new names that have been added to the meeting tomorrow.
You can scroll down to the first email to see comments on Cerner. This should give you a heads up on objections that could be forthcoming.

Sent with BlackBerry Work
(www.blackberry.com)

From: Blackburn, Scott R. <(b) (6)@va.gov<mailto:(b) (6)@va.gov>>
Date: Tuesday, Nov 14, 2017, 2:21 PM
To: (b) (6)@mitre.org<mailto:(b) (6)@mitre.org>>
Cc: (b) (6)@mitre.org<mailto:(b) (6)@mitre.org>>
Subject: RE: VA MEETING

Thanks (b) (6) again for raising. I just connected with the Secretary. It is ok for Bruce to join and also ok for (b) (6) to join. If you have one handy, could you get a bio for (b) (6) so I can share with the team (so they understand who is providing the input)?

For CIOs that ask about Bruce (like (b) (6) did last night), we can say that Bruce is an advisor and part of the extended White House / VA team.

From: (b) (6)@mitre.org]
Sent: Tuesday, November 14, 2017 12:47 PM

To: Blackburn, Scott R.
Cc: (b) (6)
Subject: [EXTERNAL] FW: VA MEETING

Hi Scott,
Please see the email trail below. Just want you aware in case we have people joining the call without your knowledge or approval.
Thanks,
Best,
(b) (6)

(b) (6)
MITRE
From: (b) (6)@PARTNERS.ORG<mailto:(b) (6)@PARTNERS.ORG>>
Date: Tuesday, Nov 14, 2017, 11:43 AM
To: (b) (6)
<(b) (6)@mgh.harvard.edu<mailto:(b) (6)@mgh.harvard.edu>>
Cc: (b) (6)@mitre.org<mailto:(b) (6)@mitre.org>>
Subject: RE: VA MEETING

But do the people hosting the call know you are going to be on the call? I am copying (b) (6) as he is helping coordinate the call. (b) (6)

From: (b) (6)
Sent: Tuesday, November 14, 2017 11:31 AM
To: (b) (6)@PARTNERS.ORG<mailto:(b) (6)@PARTNERS.ORG>>
Subject: RE: VA MEETING

Dear (b) (6)
Thanks for the note. I think that you and I may have a little mis-understanding. I agree that you can of course handle the call, but (b) (6) and Bruce Moskovitz invited me to the call tomorrow so that they can have a hands-on clinicians perspective. Bruce and I spoke very briefly (between his patients) a little while ago and Bruce sent me the below information. I am hoping to touch base with you before the call if that is possible for you. I am tied up in presentations/meetings the rest of the day, but could speak this evening (6pm?) or tomorrow if that is okay with you. (And if needed I will break out of other meetings today).
Many thanks,
(b) (6)

From: (b) (6)
Sent: Tuesday, November 14, 2017 11:16 AM
To: (b) (6)
<(b) (6)@mgh.harvard.edu<mailto:(b) (6)@mgh.harvard.edu>>
Subject: RE: VA MEETING

I had a call with them today in prep for tomorrow's call. I appreciate the offer but I don't think it is my place to invite you. It needs to come from the VA.

From: (b) (6)
Sent: Tuesday, November 14, 2017 11:11 AM
To: (b) (6)@PARTNERS.ORG<mailto:(b) (6)@PARTNERS.ORG>>
Subject: FW: VA MEETING

Dear (b) (6)
Given some conflicts that (b) (6) has being a senior advisor for the VA, (b) (6) has asked me to join the 3pm VA call tomorrow to be available for the clinician perspective. Would you be up for a 15 minute check-in

call with me at some point tomorrow before the VA call? If so, then I'll reach out to (b) (6) to get us a time.

Many thanks,

(b) (6)

From: (b) (6)

Sent: Tuesday, November 14, 2017 11:06 AM

To: 'Bruce Moskowitz' <(b) (6)@mac.com<mailto:(b) (6)@mac.com>>

Subject: RE: VA MEETING

Dear Bruce,

Many thanks for the note. I'll review the below a little later today and I'll be back in touch.

Many thanks and best,

(b) (6)

From: Bruce Moskowitz [mailto:(b) (6)@mac.com]

Sent: Tuesday, November 14, 2017 10:45 AM

To: (b) (6)

<(b) (6)@mgh.harvard.edu<mailto:(b) (6)@mgh.harvard.edu>>

Subject: VA MEETING

The call will take place this Wednesday, November 15th between 3:00 PM and 5:00 PM

Dial In Number: (b) (6)

Passcode (b) (6)

Thank you for your time and involvement. Some background information. These are my concerns as a clinician.

Cerner does not have the ability to provide the following in the Choice Program:

Tracking duplicate testing

Tracking over utilization by providers

Tracking duplicate prescriptions and medication errors.

Tracking tests that were ordered, completed and results go to all physicians involved in the Veterans care

Patient notification of critically abnormal results with followup resolution

Arranging appointment followup between the VA and Private sector

Emergency room visits in the private sector ability to access records immediately and VA physicians notified of emergency care and followup

Cerner has no registry to track what Cardiac and orthopedic devices are implanted in case there is a recall of the device

Automatic record transfer from the Choice Provider to the VA patient record with flagging new information to every VA health care worker

A radiology platform to see films in high definition to compare X-rays and ability for radiologists to efficiently find previous films. For instance a radiologist needs to know if a lung nodule is new or was there

previously and the same size.

Cardiologists need to access catheterization films in high definition

Cerner has no system to alert VA health care workers when a patient is at a particular office or hospital to participate in care management in real time.

Sent from my iPad
Bruce Moskowitz M.D.

The information in this e-mail is intended only for the person to whom it is addressed. If you believe this e-mail was sent to you in error and the e-mail contains patient information, please contact the Partners Compliance HelpLine at <http://www.partners.org/complianceline> . If the e-mail was sent to you in error but does not contain patient information, please contact the sender and properly dispose of the e-mail.

From: Zenooz, Ashwini
Sent: 14 Nov 2017 22:07:09 +0000
To: Blackburn, Scott R.
Subject: RE: VA MEETING

Yup. Got it. I will have facts.

Ashwini Zenooz, MD
EHRM Program Office

Sent with Good (www.good.com)

From: Blackburn, Scott R.
Sent: Tuesday, November 14, 2017 1:38:51 PM
To: Zenooz, Ashwini
Subject: RE: VA MEETING

They are coming from POTUS friend/doctor. Will need to handle sensitively and with facts.

From: Zenooz, Ashwini
Sent: Tuesday, November 14, 2017 4:35 PM
To: Blackburn, Scott R.
Subject: RE: VA MEETING

Scott, thanks. I just landed from a trip to Orlando. I'd be happy to respond to this but these questions are just ridiculous. They don't make sense and there is basic lack of understanding of interoperability, the solutions, radiology etc. I'm just baffled.

Ashwini Zenooz, MD
EHRM Program Office

Sent with Good (www.good.com)

From: Blackburn, Scott R.
Sent: Tuesday, November 14, 2017 11:44:20 AM
To: Zenooz, Ashwini
Subject: FW: VA MEETING

I somehow left you off (I put Windom's name twice)...

From: Windom, John H.
Sent: Tuesday, November 14, 2017 2:42 PM
To: Blackburn, Scott R.; Short, John (VACO)
Subject: RE: VA MEETING

Ok. Thanks. Not sure of the validity of any of his comments but will investigate. I could prepare a list of things Cerner has that Epic does not have that would serve no purpose. What Cerner does have is interoperability with DOD and an overall better product. I am not going to be drawn into the cherry picking game that is being done with the Cerner product. Please send that list of Epic overruns that I sent you last week to this person.
Thx
John

Sent with Good (www.good.com)

From: Blackburn, Scott R.
Sent: Tuesday, November 14, 2017 11:24:58 AM
To: Windom, John H.; Windom, John H.; Short, John (VACO)
Subject: FW: VA MEETING

Sharing in the spirit of transparency.

Dr. Bruce Moskowitz will join the call tomorrow. He is a White House advisor. I don't know much about him other than he is important. He has asked at least one other person to join (a clinician from MGH). See trail to include questions at the bottom (that I sent earlier). I connected with the Secretary and he is ok with Bruce and whomever he invites to join the call.

From: (b) (6) [mailto:(b) (6)@mitre.org]
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To: Blackburn, Scott R.
Cc: (b) (6)
Subject: [EXTERNAL] FW: VA MEETING

Hi Scott,
Please see the email trail below. Just want you aware in case we have people joining the call without your knowledge or approval.

Thanks,

Best,

(b) (6)

(b) (6)
MITRE

From: Windom, John H.
Sent: 14 Nov 2017 20:01:17 +0000
To: Blackburn, Scott R.
Subject: RE: VA MEETING

To me the session tomorrow is just a grin and bear it session. I will have my listening hat on for 2 hours.

Vr
John

Sent with Good (www.good.com)

From: Blackburn, Scott R.
Sent: Tuesday, November 14, 2017 11:56:17 AM
To: Windom, John H.
Subject: RE: VA MEETING

I believe this is the longtime personal doctor, and close friend, to POTUS

From: Windom, John H.
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Many thanks,

(b) (6)

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(www.blackberry.com)

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For CIOs that ask about Bruce (like (b) (6) did last night), we can say that Bruce is an advisor and part of the extended White House / VA team.

From: (b) (6)
Sent: 13 Jun 2017 12:59:25 -0400
To: (b) (6); Short, John; (b) (6)
Subject: FW: [EXTERNAL] Agenda: Conference Call | VA, Apple & Medical/Digital Experts - Wednesday, June 14th / 11:00 AM - 12:30 PM EST (8:00 AM - 9:30 AM PST)
Attachments: confcallagenda.pdf

FYI.

From: (b) (6)
Sent: Tuesday, June 13, 2017 12:49 PM
To: (b) (6); (b) (6)
Subject: FW: [EXTERNAL] Agenda: Conference Call | VA, Apple & Medical/Digital Experts - Wednesday, June 14th / 11:00 AM - 12:30 PM EST (8:00 AM - 9:30 AM PST)

FYI -

(b) (6)
Office of the Acting Assistant Secretary/CIO
Office of Information & Technology
Work Cell: (b) (6)
Email: (b) (6)@va.gov

The Navy is much more than a job; much more than service to country. It is a way of life. It gets in your blood.
Albert Pratt, The Honorable Assistant Secretary of the Navy 1955

From: (b) (6) [mailto:(b) (6)@frenchangel59.com]
Sent: Tuesday, June 13, 2017 12:33 PM
To: (b) (6) 'Bruce Moskowitz'; (b) (6)@gmail.com; (b) (6)@frenchangel59.com; (b) (6)@va.com; (b) (6); (b) (6); (b) (6); (b) (6); (b) (6); (b) (6)@mayo.edu; (b) (6)@mayo.edu; (b) (6)@ccf.org; (b) (6)@ccf.org; (b) (6)@jhu.edu; (b) (6)@kp.org; (b) (6)@responsivehealth.org; (b) (6)@PARTNERS.ORG; (b) (6); (b) (6)@brefnet.org; (b) (6)@PARTNERS.ORG; (b) (6)@BWH.HARVARD.EDU; (b) (6); (b) (6); (b) (6)@PARTNERS.ORG; (b) (6); (b) (6); (b) (6)@cloverhealth.com; (b) (6)@cognizant.com; (b) (6)@cognizant.com
Subject: [EXTERNAL] Agenda: Conference Call | VA, Apple & Medical/Digital Experts - Wednesday, June 14th / 11:00 AM - 12:30 PM EST (8:00 AM - 9:30 AM PST)

Wednesday, June 14th

11:00 AM – 12:30 PM EST (8:00 AM – 9:30 AM PST)

Dial-in Information:

US: (b) (6)

International: (b) (6)

Passcode: (b) (6)

****6 – Mute or un-mute your line***

Thank you,

(b) (6)

(b) (6) (Office)

(b) (6) (Cell)

(b) (6) [@frenchangel59.com](mailto:frenchangel59.com)

Conference Call | VA, Apple & Medical/Digital Experts

Date: Wednesday | June 14, 2017

Time: 11 a.m. – 12:30 p.m. ET/10 – 11:30 a.m. CT/8 – 9:30 a.m. PT

Dial-in Information: *United States:* (b) (6)

International: (b) (6)

Passcode: (b) (6)

Participants: Bruce Moskowitz, M.D.
Marc Sherman
Ike Perlmutter

Apple:

(b) (6) – Apple, Chief Executive Officer
(b) (6) – Apple, Chief Operating Officer
(b) (6) – Apple, Director of Global Government
(b) (6) – Apple, Vice President for Public Policy and Government Affairs

Office of Veterans Affairs:

David Shulkin, M.D. – Secretary of Veterans Affairs
Poonam Alaigh, M.D. – Acting Under-Secretary for Health
Darin Selnick – Senior Advisor to the Secretary
Rob C. Thomas II – Acting Assistant Secretary & Chief Information Officer
Department of Veterans Affairs
(b) (6) – Senior Advisor, Acting Under-Secretary for Health, Department of Veterans Affairs, Veterans Health Administration

Medical Institutions:

(b) (6) – Chief Information Officer, Mayo Clinic
(b) (6) – Associate Dean/Center for Connected Care, Mayo Clinic
(b) (6) – Interim Chief Information Officer, Cleveland Clinic
(b) (6) – Associate Chief Information Officer, Cleveland Clinic
(b) (6) – Senior Vice President and CIO, Johns Hopkins Health System, Johns Hopkins Medicine, Vice Provost and CIO, Johns Hopkins University
(b) (6) – Senior Vice President, Care Delivery Technology Services, Kaiser Permanente
(b) (6) – Cofounder, CEO - Responsive Health
(b) (6) M.D. – Co-founder, Responsive Health/ Mount Sinai Health System
(b) (6) – Payer Advisor, Responsive Health
(b) (6) – Development Head, Responsive Health
(b) (6) – SME for Public Sector, Responsive Health
(b) (6) – Biomedical Research & Education Foundation, Executive Director
(b) (6) – Vice President, Connected Health | Partners HealthCare
(b) (6) – Chief Information Officer and Vice President, Information Systems, Brigham Health

Moderator:

(b) (6) – Chair, Department of Public Affairs/Mayo Clinic

Agenda:

- 1) Introductions – (b) (6) Moderator
- 2) Review/Discussion of Purpose of Call – All
Draft Meeting Objectives:
 - Consensus/endorsement of goals
 - Define roadmap and next steps
 - Determine core working team moving forward/ARCIV
- 3) Project Objectives/Status | Veteran’s Administration Perspective – David Shulkin, M.D.
- 4) Perspective of the Medical Experts – What Works/What Doesn’t – Medical Experts
 - Status of portable medical record for the private sector
 - What will it take to get to “state of the art?”
 - Preventive health/early detection of disease
 - How does the medical record pick up that which may threaten health
 - What are medical centers working on that has been well received by patients?
- 5) Discussion of Digital/Veteran Platform Project Road Map – (b) (6)



Digital Veteran
Platform Experience.c

The attachment that reflects shared perspective of medical providers/Apple team.

- 6) Review/Discussion of Potential Project Requirements – All
 - Clinical needs re: obtaining information from the patient’s EMR
 - Quick reference screen
 - Patient problem list
 - Medications
 - Allergies
 - Laboratory results
 - Diagnostic tests by specialty
 - Clinical notes by specialty
 - Dynamic vs. static EMR
 - Early disease detection
 - Chart medication adherence
 - Laboratory results depicted by in graph form to permit lifestyle modification conversations
 - Alerts for follow-up appointments/tests
 - Integration of clinical notes, lab and diagnostic text into integrated platform
- 7) Next steps Discussion:
 - Defining the core working team – ARCIV
 - Timeline

Digital Veteran Platform: Veteran-Mediated Data Exchange

Background

Improving the Veterans' experience and enhancing strategic partnerships are two of the key focus areas for the 2015 myVA Transformational Plan. Recognizing that technology will be the foundation on which this transformation will occur, the VA has proposed a "Digital Veteran Platform." The objective of this platform is to "build an ecosystem enabling external integration and innovation enabling transparency with Veterans and their care providers while expanding use of data with real-time analytics to support automated recommendations for care."

As a complement to this platform, the VA and the White House have proposed a collaboration with innovative health systems and Apple to work on four initiatives:

1. **Care Finder:** a mechanism for Veterans to discover an appropriate medical facility and/or physician based on available services and location.
2. **Veteran Health Data Exchange (VHDE):** the ability for Veterans to download and view health records from both the Veteran sector and private sector on a portable device.
3. **Improve Medication Tracking:** a technology solution for Veterans to view medications and be able to track medication compliance, preventing over-utilization of controlled substances, and preventing medication errors.
4. **Transitions of Care:** a system that facilitates Veteran compliance with discharge recommendations (e.g., prescription pick-up, medication compliance, follow-up appointments, home health services) and communicates status to the care team.

This digital platform is being proposed at a time when the national health expenditure is rapidly increasing, representing 17.8% of GDP in 2015, or \$3.2 trillion (\$9,990 per person), a 5.8% rise compared to the previous year.ⁱ Despite these costs, the US remains well behind its peers in how efficiently that expenditure results in improved health and longevity.ⁱⁱ

There is growing recognition that the fundamental changes required to reduce costs and improve outcomes in our healthcare system must begin with empowering the patient to take a greater role in her/his care. Initiatives such as Open Notes - which the VA helped to pioneer - have shown that giving a patient full and transparent access to her/his health records improves safety as well as trust in the clinical relationship.ⁱⁱⁱ Furthermore, evidence is mounting that empowering patients to care for themselves results in decreased costs *and* improved outcomes.^{iv}

However, patients today lack the ability to get an integrated view of their health data across a myriad of electronic health record (EHR) systems in the marketplace. Fortunately, private sector initiatives such as the Argonaut Project^v have proven that EHR vendors can align with the interests of patients and health systems to agree on a path forward involving standard application programming interfaces (APIs) for health. Additionally, bipartisan legislation such as the 21st-Century Cures Act has required health IT products to expose health data via APIs. These advances, when taken together, pave the way for a true 21st-Century Health IT System designed with the patient at the center.^{vi} The National eHealth Exchange has also supported

health information exchange for clinicians, but this information is generally not directly available for patient viewing.

It is within this rich milieu of health IT advancement that the VA and the White House have proposed this collaboration to identify solutions to problems for which the feasibility of a solution is only just becoming a reality.

The VA has long been a pioneer in health IT innovation, which has been a necessity given their large and geographically diverse patient population. This is yet another opportunity for the VA to set an example for the rest of the country to follow, and it couldn't come at a more critical time for our nation.

Proposal

In order to achieve the greatest benefit for our Veterans in the shortest amount of time, we propose that this set of initiatives should begin by leveraging the work of the standards community to enable Veteran health data exchange (initiative #2 above). Only after this is in place will we be able to explore the feasibility of improved medication tracking and seamless transitions of care.

The 'Care Finder' functionality (initiative #1 above) represents an extension of the current VA tool found at vets.gov, however, a more patient-centric approach would likely improve Veteran engagement. The lack of a national health system, universal patient identifier, and common provider directory presents several challenges with respect to ensuring this resource is accurate and up to date. This concept and implementation will continue to be explored.

Five health systems have agreed to participate in support of these initiatives:

- Cleveland Clinic
- Johns Hopkins Medicine
- Kaiser Permanente
- Mayo Clinic
- Partners HealthCare

The 5 selected health systems will implement APIs based on the Fast Healthcare Interoperability Resources (FHIR) standard, as outlined in the Argonaut Data Query Implementation Guide 1.0.0:^{vii} All major EHR vendors, including Epic and Cerner, have implemented or are working on the implementation of this standard within their software. This is of critical importance given the recent announcement by U.S. Secretary of Veterans Affairs Dr. David J. Shulkin that the VA will adopt the Cerner EHR to replace their current VistA health records system.^{viii}

Once this is in place, Apple will enable the Veteran to access the following items from her/his health record: problems, medications, allergies, laboratory test results, and procedures. The health records of multiple institutions may be aggregated and harmonized into one 'virtual' master copy, available for viewing. This data will continue to reside within each organization, but be accessible to Veterans via APIs to present the information when requested.

Given the reality that many Veterans receive a portion of their care at non-VA health systems (a fact accelerated by the 2014 Choice Act^{ix}), this newfound data portability - with the patient at the center - will ensure that VA providers always have the most up-to-date information about a patient so that they can provide the most effective care.

This work will begin as a limited pilot among patients who receive care at both the VA and one of the 5 health systems listed above. It will then be implemented across the VA and to any interested health system in the U.S. who has an EHR platform compatible with this open standard.

Guiding Principles

Healthcare is complex, and the challenges will be difficult to address. In order to succeed, all participants must be aligned according to a set of guiding principles. We propose to adhere to the following:

1. We will act in the best interests of the Veteran.
2. We will support the ability of the Veteran's care team to provide the best care.
3. We will identify and implement standards-based solutions, where possible.
4. We will deploy solutions that can be leveraged and adopted by the healthcare industry more broadly.

Next Steps

Implementing the Veteran health data exchange functionality will require coordination across the health systems, the VA, and Apple. We propose that each entity select appropriate technical and business representatives to serve on an exploratory workgroup in order to define milestones, timelines, and priorities, and to have this workgroup in place by August 31, 2017. Additional members may be included as needed. This group should also identify any barriers, impediments or concerns that need to be addressed in order to further the work. The workgroup will be led by a designated representative from the VA.

While this scope of this initiative will initially be constrained in order to provide something of value to Veterans in a relatively short period of time, we recognize that there are many problems in health care worth solving, and see this as a stepping stone to work more closely with the VA to identify and find sustainable solutions to their most pressing needs.

It is hard to overstate the potential impact of this initiative; the nationwide implementation of a standards-based approach to patient-mediated data access and exchange across the VA and partner institutions will serve as a model for the future of healthcare, not only in the US, but around the world. It will set a standard by which all other health systems will be judged, and patients, once they realize the freedom and power it affords, will not settle for anything less.

ⁱ <https://www.cms.gov/research-statistics-data-and-systems/statistics-trends-and-reports/nationalhealthexpenddata/nationalhealthaccountshistorical.html>

ⁱⁱ <https://www.bloomberg.com/news/articles/2016-09-29/u-s-health-care-system-ranks-as-one-of-the-least-efficient>

ⁱⁱⁱ <http://www.nejm.org/doi/full/10.1056/NEJMp1310132>

^{iv} <https://hbr.org/2017/06/the-value-of-teaching-patients-to-administer-their-own-care>

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- ^v http://argonautwiki.hl7.org/index.php?title=Main_Page
^{vi} <http://www.nejm.org/doi/full/10.1056/NEJMp1700235>
^{vii} <http://www.fhir.org/guides/argonaut/r2/>
^{viii} <https://www.va.gov/opa/pressrel/pressrelease.cfm?id=2914>
^{ix} <https://www.va.gov/opa/choiceact/documents/choice-act-summary.pdf>

From: (b) (6)
Sent: 10 Jun 2017 13:16:08 -0400
To: Mulligan, Ricci;Thomas, Rob C. II
Cc: Short, John
Subject: Re: Update on Center Discussions
Attachments: Notes from meeting with Apple June 8.docx, Bullet Points for June 14 call with 5 Centers, WH and Apple.docx

All,

Bruce is on vacation until Monday. Darin has a call with him scheduled at 5pm. We can revise our plan Monday evening.

Attached are the notes from the meeting and the bullet points for review.

I am available this weekend to do revisions if you have feedback or questions.

(b) (6)

(b) (6)

Cell: (b) (6)

From: Ricci Mulligan <(b) (6)@va.gov>
Date: Thursday, June 8, 2017 at 4:53 PM
To: "Thomas, Rob C. II" <(b) (6)@va.gov>, (b) (6) <(b) (6)@va.gov>
Cc: "Short, John" <(b) (6)@va.gov>
Subject: Update on Center Discussions

Sir, great meeting today. Darin has a conversation with Bruce to clarify two points that were raised today concerning the App that Bruce developed. Once we receive those answers we will put together the talking points for the 14th.

(b) (6) will send to you tomorrow morning and we will have a hard copy ready for you Monday.

Have a great trip. Ricci

Ricci L. Mulligan
Acting Principal Deputy Assistant Secretary
VA OI&T

(b) (6) (O)

(b) (6) Cell

Summary of notes from meeting with Apple preparing for June 14 meeting.

Challenge #1 – Medical Facility Finder App

VA and Apple discussed the use case and current state of the EMCL facility finder mobile app. Apple started the process by asking, “What problem are we trying to solve?” Apple and VHA then focused on the need/likelihood of Veteran using a native mobile application to find a medical facility. There was doubt on Apple and VHA’s side that a Veteran in need of medical care would use the app. Maintenance of the application was also discussed. The requirements to maintain and improve the data that powers the app would be persistent to keep the app up to date. Finally, while the application seems straight forward, simply showing nearby medical facilities broken down by specialty, there would be significant challenges in showing the Veteran facilities they qualify for based on their current insurance and VA eligibility.

However, both Apple and VA are in agreement about the importance of building the Medical Facility finder app in order to insure that the overall effort is successful. Both agreed that Dr. Moskowitz considers this app a priority and he feels it will have a valuable impact on the Veteran and show that solutions can be delivered quickly inside the government.

The current state of the application is of concern to Apple. None of the Apple team could get the application to work after downloading. They also stated that a considerable rework would be required before they would put their name on it. Apple disclosed that Dr. Moskowitz’s son owns a mobile app development company that built the original app, and may be the team Bruce has in mind to deliver the updated VA branded app. Darin was added to the conversation to gain any additional insight into Bruce’s intention. He agreed that it was unclear who would be building the app and would follow-up with Bruce on the following questions:

- Who will be developing and maintaining the application?
- What are the required data sources needed to keep the list of centers up to date?

Once we hear back from Bruce we can move forward with a more clearly defined plan.

Challenge #2 – Ability for Veterans to access medical records from multiple sources using their mobile device.

VA described their vision for the DVP. Apple asked some specific questions around how we would develop our FHIR resources. We stated that we would be developing the 18 resources identified by the Argonaut project and use SAML for security until we implement OAuth 2.0. Apple seemed very pleased by our proposed approach. VHA also described their intent to enable the Veteran to be the data owner of their health information. They currently are working to develop FHIR endpoints for

Connected Care's patient generated data (PGD) database. Their next focus would be to develop similar FHIR solutions for MyHealtheVet.

Apple walked VA through the plan for the next feature set for their HealthKit offering. They disclosed that in March or April of 2018 medical providers would be able to leverage HealthKit to allow patients to access a number of components of their medical record including read access to medications, allergies, conditions, and labs. The providers would have to adhere to Apple's requirements for data sharing, but they stated that these would be FHIR based following the Argonaut project and secured by OAuth 2.0. There is great alignment between the way VA is approaching the development of our FHIR solutions and the way Apple is intending to consume them. Both sides were excited about the opportunity of working together and have VA as a partner for their release next spring.

Apple also disclosed that the 5 Centers, all users of Epic, are intending to be included in the rollout. Apple, VA, and the 5 Centers are in agreement that Challenge #2 is the area of greatest common interest, and potential to help liberate health data empowering the Veteran.

VA asked Apple their interest and capability to help develop and maintain VA's API Gateway. Apple expressed concern about their ability to bring relevant resources, SMEs and engineers, to the proposed solution because it is an area that they don't have a deep experience in. They validated our current technology selection and the approach in general.

Challenge #3 and #4 – Medication Tracking and Disposition Pathway

VA described our current plan to transition to a new EHR, and see value in working with the 5 Centers to come up with a technologically agnostic approach to dealing with these two complex problems. VHA described the number of efforts currently under way to address these issues inside their organization. We discussed utilizing a human centered design approach to better understand the processes within VA, the 5 Centers and the greater healthcare provider community. There is agreement that this is not an area of quick wins, or something that there are any obvious "silver bullet" technology solutions. These two challenges will take a much longer timeline to show quantifiable gains, but need to be pursued diligently.

Other areas that were discussed were security, analytics and the Secretary's priority of Suicide Prevention. OIT described its interest in leveraging two and three factor identification to provide Veterans. Apple discussed the importance of utilizing tokens to for end users so they wouldn't have to enter their username and password every time they need want to access their health information. This is an area that VA and Apple will further explore. Apple described their capabilities and interest in working on projects with VA involving analytics. Million Veteran's Project (MVP) was discussed as an opportunity to work together. OIT is confident it can establish a legal vehicle to be able to work together, CRADA, Strategic Partnership, Public

Partnership, etc. VHA expressed concern about VA's ability to share that data because it cannot be de-identified. Both sides agreed to find specific areas to collaborate on in the future. Regarding Suicide Prevention, Apple has a strong interest in helping anyway they can. There were no specific projects identified, but a general agreement to work together in the future.

From: Thomas, Rob C. II
Sent: 8 Jun 2017 15:20:01 +0000
To: Thomas, Rob C. II; (b) (6) Short, John (b) (6) (b) (6)
(b) (6); (b) (6)
Subject: Prep for OSHERA and Dr. Moskowitz Call

Please be on stand by for last minute prep.

From: Thomas, Rob C. II
Sent: 7 Jun 2017 20:31:48 -0400
To: (b) (6)
Cc: Mulligan, Ricci; Short, John
Subject: RE: 5 Centers Engagement Challenges narrative

Thank you (b) (6)

Warm Regards, Rob

ROB C. THOMAS II
Acting Assistant Secretary &
Chief Information Officer
Department of Veterans Affairs
Email: (b) (6)@va.gov
Office: (b) (6)

-----Original Message-----

From: (b) (6)
Sent: Wednesday, June 07, 2017 07:32 PM Eastern Standard Time
To: Thomas, Rob C. II
Cc: Mulligan, Ricci; Short, John
Subject: 5 Centers Engagement Challenges narrative

Sir -

Here is a narrative of the 5 Centers Engagement challenges and solutions.

Objective

To provide a series of health information technology solutions to support 4 mission critical Veteran healthcare functions including healthcare facility location, democratized health data exchange by the Veteran, tracking medical compliance, and improving transitions of care.

Challenge #1:

Develop a mobile app that provides a Veteran the appropriate medical facility and or physician that is geotagged to their location. It should list the closest certified cardiac center, stroke center, trauma center and pediatric center. It should also list qualified urgent care centers.

Solution:

Leverage Dr. Moskowitz's mobile app (Emergency Medical Center Locator) to develop a VA version that provides Veterans the ability to rapidly locate and navigate to a VA healthcare or urgent care facility.

Challenge #2:

Provide Veterans ability to download the records from both the Veteran sector (Veterans have access to a portable record) and private sector on their portable device. It should have the feature that would prevent duplication of tests at the time of ordering at the point of contact and the ability to send information back to their primary doctor in real time. It should also have a feature to prevent unnecessary testing and over utilization.

Solution:

Develop a FHIR based mobile application platform that provides the ability to intake Veteran health data from multiple EHR systems. The health data will have multiple uses including determining and avoiding repetition in treatment and tests. This model simplifies the development experience for all developers who need not know the internals of FHIR to produce apps.

Challenge #3:

Develop a technology solution for tracking medication compliance, prevention of over utilization of controlled substances and prevention of medication errors.

Challenge #4:

Currently the medical discharge everywhere is antiated. Patients are discharged by a floor nurse with a list of medication. We need a system that automatically checks that the patient picked up the medication and does not confuse it with medication at home. Second, track follow up appointments, health care services for home care and distributes all information to the health care team.

Solution:

The challenges of medication tracking for compliance, prevention of controlled substance overuse, and preventing adverse drug events as well as transitions of care are common across these organizations. Nuances exist within patient population, geography, reimbursements, and underlying health information technology solutions. Additionally, these challenges involve people, processes, and technology. Opportunities exist to bring leaders in this domain from across the 5Cs along with national VA experts to more closely address these issues, cross-pollinate ideas and best practices, and design future solutions. A human centered designed approach with the right participants across all participating organizations would be useful in identifying common problems to be addressed and designing the new solutions each organization needs.

(b) (6)

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(b) (6)

Cell: (b) (6)

From: Thomas, Rob C. II
Sent: 7 Jun 2017 16:06:11 -0400
To: Short, John
Subject: FW: [EXTERNAL] Re: next steps on VA project

FYI

Warm Regards, Rob

ROB C. THOMAS II
Acting Assistant Secretary &
Chief Information Officer
Department of Veterans Affairs
Email: (b) (6)@va.gov
Office: (b) (6)

-----Original Message-----

From: Bruce Moskowitz [mailto:(b) (6)@mac.com]
Sent: Wednesday, May 31, 2017 12:41 PM Eastern Standard Time
To: (b) (6)
Cc: (b) (6); (b) (6); (b) (6); Thomas, Rob C. II; David Shulkin; Poonam Alaigh
Subject: [EXTERNAL] Re: next steps on VA project

The individual, the Secretary David Shulkin, is assigning to head the VA contingent is the CIO (b) (6) Thomas who I CC'd. Mr. Perlmutter who is in direct contact with (b) (6) has asked me to coordinate who is presenting which agenda item from those on our side of the call including those from the academic centers and the VA. Since I am responsible to keep our side focused on as getting as much done prior to the call as possible your approach is on target. Mr. Perlmutter and I would hope that the call can reflect what the academic partners pointed out; that we can use existing technology at the academic centers so we do not have to reinvent the wheel. We also need an NDA for the group at responsive health who are part of Mount Sinai and if I need to sign an NDA let me know. Thank you

Sent from my iPad
Bruce Moskowitz M.D.

On May 31, 2017, at 12:16 PM, (b) (6)@apple.com> wrote:

Bruce,

Thanks very much for organizing the call last Friday. Here is what we plan as next steps:

We have draft NDAs for the five medical centers ready, and we will send directly to the contacts on the conference call last week to try to get them in place as soon as possible.

The Apple technical team wants to speak or meet with the VA so that they can obtain information they need to plan and answer the type of questions the five medical centers were asking on the conference call. We will set that up, again as soon as possible.

Once the NDAs are signed and we have been able to refine how Apple would like to approach the project, we can set up another conference call with the medical centers where Apple can participate. The goal on that call would be to dive deeper into the specifics of the work and set the agenda for getting the work done. Ideally, this can all happen before the June 14th call so we can have real progress to report.

Of course we will copy you on all emails. Please let me know if you have questions.

Thanks,

□ (b) (6) Vice President for Public Policy, Americas • le • (b) (6)

From: (b) (6)
Sent: 23 May 2017 10:35:08 -0400
To: Mulligan, Ricci
Cc: James, Bill; Short, John (b) (6)
Subject: Re: Special Project Task

Following up with this am.

(b) (6)

(b) (6)
Cell: (b) (6)

From: Ricci Mulligan (b) (6) @va.gov>
Date: Tuesday, May 23, 2017 at 10:33 AM
To: (b) (6) (b) (6) @va.gov>
Cc: "James, Bill" (b) (6) @va.gov>, "Short, John" <(b) (6) @va.gov>, (b) (6) <(b) (6) @va.gov>
Subject: RE: Special Project Task

We use the POC that Darin will set us up with at Apple. Please get with Darin. Ricci

Ricci L. Mulligan
Acting Principal Deputy Assistant Secretary
VA OI&T

(b) (6) (O)
(b) (6) Cell

From: (b) (6)
Sent: Tuesday, May 23, 2017 9:07 AM
To: Mulligan, Ricci
Cc: James, Bill; Short, John; (b) (6)
Subject: RE: Special Project Task

I don't have a number for them. Do we use the POC that Mr. Thomas was talking to?

Sent with Good (www.good.com)

-----Original Message-----

From: Mulligan, Ricci
Sent: Tuesday, May 23, 2017 08:32 AM Eastern Standard Time
To: (b) (6)

Cc: James, Bill; Short, John; (b) (6)

Subject: RE: Special Project Task

Excellent, they want us to work with Apple but do we have a number we can call, if not we will get from the boss. Ricci

Ricci L. Mulligan
Acting Principal Deputy Assistant Secretary
VA OI&T

(b) (6) (O)
(b) (6) Cell

From: (b) (6)
Sent: Tuesday, May 23, 2017 8:28 AM
To: Mulligan, Ricci
Cc: James, Bill; Short, John; (b) (6)
Subject: RE: Special Project Task

Morning Ma'am

We started working this yesterday. It is a pretty straightforward app.

I can update you later this am.

Thanks,
(b) (6)

Sent with Good (www.good.com)

-----Original Message-----

From: Mulligan, Ricci
Sent: Tuesday, May 23, 2017 08:20 AM Eastern Standard Time
To: (b) (6)
Cc: James, Bill; Short, John
Subject: Special Project Task

(b) (6) can you work this this morning. I believe Bill or John Short can assist. Please include (b) (6) Ricci

Ricci L. Mulligan
Acting Principal Deputy Assistant Secretary

VA OI&T

(b) (6) (O)
(b) (6) Cell

-----Original Message-----

From: Thomas, Rob C. II
Sent: Tuesday, May 23, 2017 8:11 AM
To: Mulligan, Ricci
Cc: (b) (6) James, Bill
Subject: FW: [EXTERNAL] Apple

Ricci,

Can (b) (6) and the Dr. take this on for us?

Warm Regards, Rob

ROB C. THOMAS II
Acting Assistant Secretary &
Chief Information Officer
Department of Veterans Affairs
Email: (b) (6)@va.gov
Office: (b) (6)

-----Original Message-----

From: Bruce Moskowitz [mailto:(b) (6)@mac.com]
Sent: Tuesday, May 23, 2017 07:56 AM Eastern Standard Time
To: Thomas, Rob C. II
Subject: [EXTERNAL] Apple

The EMCL app can be modified very quickly. Please have the group from Apple review it prior to the call June 14 and if your group can tell us if the format works then we can add what the VA needs for the choice program. We need this information prior to the June 14 call.

Sent from my iPad
Bruce Moskowitz M.D.

From: Mulligan, Ricci
Sent: 21 May 2017 19:32:25 -0400
To: Thomas, Rob C. II; (b) (6) Short, John
Subject: RE: [EXTERNAL] Apple

Yes Sir, we , Darin, (b) (6) and I with VHA had a conversation with him on Thursday where we talked through each of these issues. Darin is meeting with the team to go over the due outs from that meeting and we are then scheduled to meet virtually with the Centers, Apple and Bruce and discuss expedited roadmap. I will forward Darin's email with my notes. I did not see any feedback from VHA.

These issues are separate from the email that you sent to Apple, but at some point they will merge.

Darin has a strategy of how he wants to work this.

In the meantime, I would ask that we have a conversation with Darin to go over past conversations with VHA and how Bruce is bringing the Centers and Apple together with VA.

I will forward the email with the notes from Darin. (b) (6) has some good notes that we will add in.

Ricci

Sent with Good (www.good.com)

-----Original Message-----

From: Thomas, Rob C. II
Sent: Sunday, May 21, 2017 07:11 PM Eastern Standard Time
To: Mulligan, Ricci; (b) (6) Short, John
Subject: FW: [EXTERNAL] Apple

I could use some help here. This is the President's family doctor. It looks like I will need to talk with him tomorrow.

Can you help me with taking points on our viewpoint?

See below with the back and forth. Is this something you are familiar with?

Warm Regards, Rob

ROB C. THOMAS II
Acting Assistant Secretary &
Chief Information Officer
Department of Veterans Affairs
Email: (b) (6)@va.gov
Office: (b) (6)

-----Original Message-----

From: Bruce Moskowitz [mailto:(b) (6)@mac.com]
Sent: Sunday, May 21, 2017 06:41 PM Eastern Standard Time
To: Thomas, Rob C. II
Subject: [EXTERNAL] Apple

This is the agenda and VA reply give me best time to discuss. Thank you

1. The Veterans will need an app that provides for the appropriate medical facility and or physician that is geotagged to their location. It should list the closest certified cardiac center, stroke center, trauma center and pediatric center. It should also list qualified urgent care centers.

a. We suggest a modified use case: A telehealth provider wants to direct their patient to a nearby healthcare resource (e.g. urgent care center or call 911 for patient). The app should be able to send to the patient and the patient's telehealth providers, the location of the patient and the healthcare resources that are nearby to the patient. For example, the closest VA location, closest pharmacy, closest urgent care center, and closest contact center phone number.

2. We will need the ability for Veterans to download the records from both the Veteran sector (Veterans have access to a portable record) and private sector on their portable device. It should have the feature that would prevent duplication of tests at the time of ordering at the point of contact and the ability to send information back to their primary doctor in real time. It should also have a feature to prevent unnecessary testing and over utilization.

a. This is the FHIR Patient-Mediated data exchange concept. Please see attached FHIR concept paper.

3. We need a technology solution for tracking medication compliance, prevention of over utilization of controlled substances and prevention of medication errors.

a. This is a problem but we do not believe that this is something that can be solved with an app.

4. Currently the medical discharge everywhere is antiquated. Patients are discharged by a floor nurse with a list of medication. We need a system that automatically checks that the patient picked up the medication and does not confuse it with medication at home. Second, track follow up appointments, health care services for home care and distributes all information to the health care team.

a. This is a problem but we do not believe that this is something that can be solved with an app.

Sent from my iPad
Bruce Moskowitz M.D.

On May 21, 2017, at 6:14 PM, Thomas, Rob C. II <(b) (6)@va.gov> wrote:

Thank you Secretary.

Dr. Moskowitz, a pleasure to meet you virtually. I wrote the original thought piece we sent to Apple.

Most recently, we seem to be bogged down on the way forward. I surely welcome a conversation at your convenience.

Warm Regards, Rob

ROB C. THOMAS II
Acting Assistant Secretary &
Chief Information Officer
Department of Veterans Affairs
Email: (b) (6)@va.gov
Office: 202-461-6910

-----Original Message-----

From: David shulkin [mailto:(b) (6)@aol.com]
Sent: Sunday, May 21, 2017 03:41 PM Eastern Standard Time
To: Bruce Moskowitz
Cc: Thomas, Rob C. II
Subject:

Rob- i would like to connect you with Dr Bruce Moskowitz, a trusted advisor, to see if the two you could have a conversation about our Apple discussions

David

Sent from my iPhone

From: Blackburn, Scott R.
Sent: 21 Mar 2018 10:23:35 -0700
To: Windom, John H.;Zenooz, Ashwini;Truex, Matthew;Short, John
(VACO); (b) (6)
Subject: FW: [EXTERNAL] (b) (6)
Attachments: suggestions to VA on the contract.docx, Requests for Cerner EHR platform to Support Innovation and Interoperability smh.docx, Copy of 003 - VA EHRM Non-Functional RTM (Amended 2.16.2018) smh.xlsx

In case you guys didn't get these note from (b) (6)

-----Original Message-----

From: Blackburn, Scott R.
Sent: Wednesday, March 21, 2018 1:09 PM
To: 'Bruce Moskowitz'
Cc: IP; (b) (6)@gmail.com
Subject: RE: [EXTERNAL] (b) (6)

Figured it out. Here are the files/notes that (b) (6) wrote up for us...

-----Original Message-----

From: Bruce Moskowitz [mailto:(b) (6)@mac.com]
Sent: Wednesday, March 21, 2018 11:30 AM
To: Blackburn, Scott R.
Cc: IP; (b) (6)@gmail.com
Subject: [EXTERNAL] (b) (6)

Can you send his notes to us? Thank you

Sent from my iPad
Bruce Moskowitz M.D.

1. Read and write of all patient specific data through FHIR APIs and services by [specific date] post signing
 - a. Cerner progress on comprehensive support of FHIR has been slow. Only a few development resources are working on FHIR services. There should be timelines or at least a resource commitment of some kind to make sure continued development of FHIR resources is a priority.
2. Support for CDS Hooks
3. Support for an HL7 approved publish and subscribe (pub/sub) infrastructure and services.
4. Support model driven application development tools that use FHIR resources and profiles
5. Support a “time drive” infrastructure and services.
6. Provide a terminology server that is compliant with the FHIR Terminology Module
7. Support a knowledge repository for all kinds of knowledge artifacts: CDS logic, FHIR profiles, order sets, workflows, etc.
8. Provide the ability for the VA to quickly change workflows. Currently, workflows are hard coded into the applications. It makes it nearly impossible to change workflows to accommodate changes in clinical practice.
9. Specify the time frame after a new version of FHIR is approved that Cerner will upgrade its services – one year?
10. Support VA or other 3rd party defined FHIR profiles
 - a. Use of FHIR profiles in model driven application development
 - b. Ability to test conformance of an application to a specific set of FHIR profiles
 - c. Services automatically test conformance to profiles in the Cerner FHIR services
11. It is difficult to discern an overall architecture for the desired system. I think there is a danger that Cerner will just add more unmaintainable code (“bolt-on functionality”) to the existing spaghetti bowl to meet VA requirements, rather than creating a thoughtful new next-generation system. Would it be possible to add a diagram that would show a high level view of the future system with the relationship to external systems, etc.?
12. I think several of the requirements listed in “003 – VA EHRM Non-Functional RTM (Amended 2.16.2018)” are unreasonable and/or infeasible.

Functionality Requests for Cerner EMR platform to Support Innovation and Interoperability

In order to meet the innovation needs of (b) (4) to be a model health system, several types of enhancements to the Cerner EMR platform are needed. These enhancement types consist of the following:

1. Open Services (i.e., FHIR resources)
 - a. Data Read Services
 - b. Data Write Services
 - c. Order Submission Services
 - d. Select Event Publication Services
2. Open Application Framework
3. Open CDS Integration (i.e., CDS Hooks)
4. Open Development Tools

Additionally, a governance structure is needed in order for (b) (4) and Cerner to determine specific functionality, prioritization, acceptance criteria and schedule for enhancements. The governance structure would also handle change requests and disputes.

These enhancement requests can be described in more detail by applying them to several applications that (b) (4) can deploy or could use as demonstrations of the innovation and interoperability capabilities and/or building blocks for future innovations on the platform. Example applications include: Pulmonary Embolism (PE) Diagnosis and Treatment, Pediatric Growth Chart, Neonatal Bilirubin Tracking, Opioid Management, Device Interoperability Pilot, Referral/Scheduling Management, and Health Information Exchange Data Viewer.

(b) (4) is working closely with the (b) (4) on several grant-funded projects to advance several of these applications.

For each of the enhancement types listed above, more detail is presented here, along with information about how these relate to the example applications.

Open Services

Open Services refers to the open, standards-based service API (application programming interface) on top of the Cerner EMR platform. It provides access from 3rd party applications and services to the underlying Cerner platform, particularly the data and knowledge assets within Cerner repositories, but also logic and services available within the Cerner platform.

Intermountain and Cerner have agreed that this layer would utilize the HL7 FHIR specification, at least initially. Cerner has made considerable progress in implementing a FHIR service layer on top of its EMR, particularly for Data Read services to meet requirements of Meaningful Use and the Clinical Quality Framework (CQF). But additional and timelier enhancements in this area are needed.

Open Services enhancements fall under the following categories:

1. FHIR Resource Read Services: These Services allow a 3rd party application or service to access data from repositories within the Cerner platform. The Resources also allow query capability according to the FHIR standard, which can be enhanced by FHIR Profiles. The query capability is mentioned because we have found inconsistencies in the way that Cerner supports FHIR queries and we would like to resolve this with them. Cerner supports querying and reading most of the more “popular” FHIR resources under FHIR DSTU2, but specific data types within resources such as Observation and DocumentReference may not be fully available through the interface. There are also attributes of certain resources that are not returned by the services. These missing data types and attributes are essential to meet the needs of the example applications. More detail is provided for each example application.
2. FHIR Resource Write Services: These Services allow a 3rd party application or service to write data into a repository within the Cerner platform. Cerner supports several Resource Write Services, but this list is far from complete to support functionality required by some of the example applications. More detail is provided for each example application.
3. Support for FHIR Profiles: FHIR Profiles allow a FHIR Resource to be tailored to a specific need, and can be used to specify a higher level of semantic interoperability for resource data shared between FHIR resource servers and consumers (e.g., a Cerner repository providing access through FHIR services, and a 3rd party application querying for data from the Cerner repository through the FHIR services). Use of FHIR Resources alone does not ensure true semantic interoperability. Cerner does provide support for the CQF FHIR Profiles, particularly as a result of participation in the Argonauts consortium, but these profiles are at a level too high to ensure true semantic interoperability, and they do not completely cover the data access needs of the example applications. We have also found inconsistencies in the way that EMR vendors provide support for FHIR profiles. We would like to work with Cerner, and other EMR vendors, to develop more complete specifications on what it means to support a FHIR profile (possibly through the Argonauts consortium). We would also like to work with Cerner on specific FHIR profiles developed through the HSPC/CIMI initiative to support the example applications. More detail for specific FHIR profiles is provided for some of the example applications.
4. Support for higher-level FHIR Resources: “Higher-level FHIR Resources” include functionality that goes beyond reading and writing data to/from a repository. These higher-level functions typically support workflow, such as ordering and scheduling. It also includes the ability to post events (the “Flag” resource in FHIR). More detail for specific higher-level resources is provided for some of the example applications.
5. Migration strategy for FHIR versions: FHIR is a developing standard, and HL7 continues to work on new versions of the standard. Most EMR vendors have settled on current support for the DSTU 2 version, but HL7 has published Release 3. Successive versions of FHIR have broken previous versions. This understandably leads to some hesitation about fully supporting a given release if it will be broken in a short time, and/or potentially never will be utilized in a production environment. We also have no guarantee from an application development perspective on if/when a vendor will support a given release, and when a previous release will become unsupported. We need to work with Cerner

on a strategy for handling support and migration of FHIR versions, and we need to come to agreement on whether the unknowns about HL7 FHIR development should deter current use of a given release version. This should probably be handled by the governance structure suggested earlier.

Examples of how the Open Services apply to the example applications are the following:

Pulmonary Embolism (PE) Diagnosis and Treatment: The accompanying Excel file (Pulmonary Embolism Factors.xlsx) presents details on the specific data types used by the PE tool, and the corresponding FHIR Resources and FHIR Profiles required. It also shows which services need Read and/or Write functionality. Note that the AlertEvent model is still under discussion, as we are unsure what Resource would correspond with this.

Pediatric Growth Chart: This application needs standard Patient and Encounter Resources, as well as the Observation Resource mapped to various data types for Height/Length, Weight, Head Circumference and BMI. These are Read services today, but it would be helpful to the clinician workflow to allow Writes if these are recorded during use of the application. Clinicians would also like to write the calculated percentiles (Observation Write) back to the patient's record so that they may be included in progress notes.

Neonatal Bilirubin Tracking: Enhancements made to this application by the (b) (4) make the latest version significantly better than the iCentra version. The application requires exact time of birth, bilirubin lab results (Observation, Read/Write), and bilirubin lights therapy (Procedure). The CDS support added to the application would allow ordering of light therapy or transfusion (Order, ProcedureRequest).

Opioid Management: The application requires fully specified Medication, Encounter and lab-related (Observation) Resources, where all structured elements (including medication route and frequency) use standard code systems.

Device Interoperability Pilot: We are working with the Center for Medical Interoperability on a FHIR-based standard for device data interchange. (Cerner is a member of C4MI, too.) For this pilot, we need the ability to write device data (Observation) to the patient record, and collect information about a Device.

Referral/Scheduling Management: The first use case for this application is for surgery referral requests and the workflow events that occur until the episode concludes (including the follow-up with the referring physician). The applications requires a ProcedureRequest Resource (Read/Write), C-CDA Document (Document Reference, Binary, Read/Write), Procedure, Patient and Encounter References, as well as information about the Organization, Practitioner, HealthcareService

Health Information Exchange Data Viewer: The Viewer application allows users to view health information exchange information shared from other organizations, perform reconciliation,

request data from other organizations, and create C-CDA documents to share with other organizations. The application requires Read and Write capabilities for C-CDA documents, as well as the ability to read sections of the patient's medical record in order to create a C-CDA document (e.g., Medication, Condition, AllergyIntolerance, Observation, Patient, Encounter, Procedure, etc.). Advanced features include the ability to decompose a C-CDA from another institution and Write the structured data into the patient's record.

Open Application Framework

The Open Application Framework refers to technology needed to integrate 3rd party applications within the "application desktop" of the Cerner EMR (Millennium/iCentra). This includes the ability to open an application directly from the EMR, keep the application's window within the parent window of the EMR, to support a security model allowing management of the security status of the application, and share application context (user, patient, encounter, etc.) with the application. Intermountain and Cerner have agreed that the SMART standard will be used for this framework. Cerner currently implements this by providing an mPage wrapper around a generic SMART container in which the 3rd party app is hosted. The app can be launched from a link within the iCentra left-hand navigation menu. For example, the Pediatric Growth Chart SMART on FHIR app is currently available in production in iCentra and can be launched from the navigation menu.

An enhancement that would be useful for several of the example applications is the ability to launch or embed applications from other locations within the EMR. For example, it would be more efficient for the Growth Chart app to be embedded directly within the clinician's workflow mPage so that it can be viewed in context with other information about the patient (without having to navigate to a separate app in the menu). We have also discussed the ability to launch apps from tracking boards (e.g., Launch Point), for example the ability to launch the PE diagnostic tool when an indicator on Launch Point suggests a possible pulmonary embolus that needs to be evaluated using the tool. The Bilirubin Tracking and Opioid Management apps would also benefit from such integration.

A general facility to communicate information from external processes would also be of value. The ability to publish data and events for applications to subscribe to invites asynchronous creation of observations, reminders, suggestions, and alerts. We would welcome the opportunity to work with Cerner to develop an efficient and effective mechanism to integrate these messages into the clinical workflow. A part of this can be accomplished using the CDS-Hooks technology described below.

In addition, we need to work with Cerner to handle other aspects of open application integration, such as handling of additional contexts and the ability to communicate from the app back to the EMR (in addition to FHIR data services) in order to perform other functions such as place an order on the order scratchpad, switch context, or launch another application.

Open CDS Integration

EMRs become much more robust and functional when they support clinical decision support (CDS), particularly when that CDS is delivered at the right time to the right person. There is growing support in the healthcare community for using CDS services that allow decision support content to be available from any trusted source and located either within the walls of the institution or EMR provider, or externally (in the “cloud”). Cerner is actively supporting the HL7 CDS Hooks standard for providing 3rd party CDS services. The CDS Hooks standard allows triggers (“hooks”) from the EMR to call external services that provide responses in the form of information, suggestions and app links. The supported event triggers are a small set of the potential triggers that may be needed in the future, and the current methods for displaying the responses are limited. (b) (4) and Cerner need to work together to expand both the set of triggers and the methods for handling the responses. We should also work with Cerner to push the testing and implementation of the app link CDS Hook response in order to launch example applications like the PE, Opioid Management, and Bilirubin tools. The supported triggers also need to expand beyond just user events (e.g., “Open patient chart”, “Order med”) to events triggered by internal actions (e.g., storing of an observation, result of a Discern rule).

We need to stay informed about the Clinical Query Language (CQL) HL7 standard for expressing decision support logic in a standard format so that these knowledge artifacts may be easily shared.

While considering CDS, we should also think beyond the single-session decision support rules that drive many of the alerts, reminders and suggestions that clinicians typically see, and also address the infrastructure needed to support long-running, stateful processes such as are found in care process models. HL7 and OMG are working on applying business process modeling standards to healthcare, and these may significantly enhance the way we develop and deliver CDS. Example applications such the PE tool involve stateful processes. (b) (4) version of this tool utilizes an open source BPMN engine, and we need to encourage Cerner to look at this technology in order to support innovation capabilities on their platform.

Open Development Tools

Open Development Tools may be used by development groups to develop applications (loosely defined as user-facing applications as well as services, CDS logic and other knowledge artifacts) using the open service, application and CDS standards mentioned above. These tools make it easier and more efficient to develop applications whose underlying terminology, data models and integrations are syntactically and semantically correct. The tools would incorporate FHIR profiles and FHIR terminology services. Cerner could have a true innovation platform if they provided such tools to 3rd parties as part of their platform. They could ensure that any application built using these tools would work out of the box and could be interoperable across any of their other customers using the open standards. Assuming common adoption of interoperability standards across vendors, the applications may also be assured of working across vendor EMRs. This will result in a knowledge sharing community, and one where the entire healthcare industry becomes a learning healthcare system.

From: Foster, Michele (SES)
Sent: 21 Mar 2018 09:01:24 -0700
To: Windom, John H.
Subject: RE: Meeting with Secretary Shulkin

Excellent-thank you John!

Sent with Good (www.good.com)

From: Windom, John H.
Sent: Wednesday, March 21, 2018 9:27:14 AM
To: Truex, Matthew; (b) (6) Foster, Michele (SES); (b) (6)
Subject: FW: Meeting with Secretary Shulkin

fyi

John H. Windom, Senior Executive Service (SES)
Program Executive for Electronic Health Record Modernization (PEO EHRM)
Special Advisor to the Under Secretary for Health
811 Vermont Avenue NW (b) (6)
Washington, DC 20420
(b) (6)@va.gov
Office: (b) (6)
Mobile: (b) (6)
Executive Assistant: (b) (6) – Appointments and Scheduling
(b) (6)@va.gov Office: (b) (6)

From: Blackburn, Scott R.
Sent: Wednesday, March 21, 2018 9:17 AM
To: Windom, John H.
Cc: Zenooz, Ashwini; (b) (6) Short, John (VACO)
Subject: RE: Meeting with Secretary Shulkin

Sounds like a plan. I will come in and be there in person.

From: Windom, John H.
Sent: Wednesday, March 21, 2018 9:16 AM
To: Blackburn, Scott R.
Cc: Zenooz, Ashwini; (b) (6) Short, John (VACO)

Subject: Meeting with Secretary Shulkin

Importance: High

Sir,

I recommend using the 1100-1130 meeting with Shulkin to get clear direction from him on what it takes to close out the contract. The only comments I would make from an action perspective:

1. We will be assembling the EHRM industry advisory council as discussed. Participants likely to include:

(b) (6) (Hopkins)

(b) (6) (Sutter)

(b) (6) (UPMC)

(b) (6) (Rush)

(b) (6) (Mayo)

(b) (6) (Intermountain)

(b) (6)

(b) (6) (Leavitt Partners)

(b) (6) (American College of Physicians)

(b) (6) (Cleveland Clinic)

(b) (6) (Mass General Hospital)

Dr. Bruce Moskowitz (Tenet)

(b) (6) (Geisinger)

(b) (6) (New York Presbyterian)

2. We will setup the recommended interoperability test platform/sandbox as part of our IOC efforts and associated testing requirements.
3. We will solidify the DVP requirements and associated API strategies based on comments from the external experts.
4. Re-validate interoperability, device registry, etc. language contained in the contract.
5. Continue to solidify our PEO staffing structure in support of present and future contract oversight requirements.

Mr. Secretary, what else did your hear? I believe we are ready.

Thoughts.....?

John

John H. Windom, Senior Executive Service (SES)

Program Executive for Electronic Health Record Modernization (PEO EHRM)

Special Advisor to the Under Secretary for Health

811 Vermont Avenue NW (b) (6)

Washington, DC 20420

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Executive Assistant: (b) (6) – Appointments and Scheduling
(b) (6) @va.gov Office: (b) (6)

From: Blackburn, Scott R.
Sent: 20 Mar 2018 19:21:00 -0700
To: (b) (6)
Cc: Short, John (VACO);Zenooz, Ashwini;Windom, John H.
Subject: RE: [EXTERNAL] RE: VA EHR Call Update

I agree with you.

If you think it is helpful, I'd be happy to connect you directly with (b) (6) so you guys can talk this through and make sure we didn't miss a point (or make sure he understands what we are doing). I am afraid of the back-channel talk that happens with these guys.

From: (b) (6)
Sent: Tuesday, March 20, 2018 10:19 PM
To: Blackburn, Scott R.
Subject: RE: [EXTERNAL] RE: VA EHR Call Update

I don't get it. What is said below is where we are trying to go with standards. Our contract could site the specific standards (no argument here). But even if you did everything below there is still quite a bit of daylight between what he was saying on the phone (semantic interoperability, machine learning) and having the data appended to the EMR when the initiating institution passes the data using a standard. I don't see anything about how you make the sender adhere to standards, especially how you have Cerner "make" the other EHRs do it.

(b) (6)
(b) (6)

From: Blackburn, Scott R.
Sent: Tuesday, March 20, 2018 7:34:36 PM
To: (b) (6)
Subject: FW: [EXTERNAL] RE: VA EHR Call Update

From: (b) (6) [mailto:(b) (6)@mayo.edu]
Sent: Tuesday, March 20, 2018 4:25 PM
To: Blackburn, Scott R.; (b) (6)
Cc: Windom, John H.; Truex, Matthew; Short, John (VACO)
Subject: Re: [EXTERNAL] RE: VA EHR Call Update

Scott,

I reviewed the material you sent regarding the proposed VA EMR contract and statement of work. I have one area of concern regarding the interoperability of the system with community care providers. For the

new VA EMR to efficiently serve patients, maximize safety and lower medical costs, medical records from the military, VA and community care providers under contract must be viewable in a seamless electronic format. The language of the contract and statement of work do not require this of the Cerner system.

In my experience using 3 versions of the Cerner EMR, the records from outside providers are imported as a CCD or CCA file and labeled as "Outside Material" with no way to identify file content or correlate internal study results with similar outside studies. For example a fax with a coronary angiogram report and a colonoscopy report will be included in the same "Outside Material" file. The date on the Outside Material file is the date of entry into the Cerner EMR, with no relation to the date of the file contents. These results are neither indexed nor searchable. The effort required of providers to open and read all pages of each file is infeasible and therefore tests are needlessly repeated at substantial cost and risk to patients.

I recommend that the VA EMR contract and statement of work be amended to require that a core interoperability strategy be operational at the time of initial EMR implementation. The amended contract and statement of work should specify that that all community care provider materials be indexed and searchable by specific diagnosis and test result, and that these results be linked to relevant parts of the internal VA records by date and medical discipline. For example, a coronary angiogram report at an outside facility performed in January 2018 should appear in the VA EMR under Cardiology Testing (nomenclature from Cerner Mayo installations) on the date of the study. Current operational examples of successful EMR interoperability at the level required include EPIC to EPIC data exchange or a proprietary intra-organization system used at Mayo Clinic called Synthesis. We would recommend that you utilize standards for this as promulgated by the Federal government (e.g., Meaningful Use 2015 edition, and the Trusted Exchange Framework and Common Agreement initiated by the Department of Health and Human Services) and by industry (e.g., the HL7 Fast Healthcare Interoperability Resource standards and industry-led Argonaut and SMART projects). This recommendation has been reviewed by Mayo Clinic leadership and we believe is consistent with other feedback you have received from Mayo Clinic experts.

I look forward to discussing the VA EMR during the conference call at 7:30. My flight to ATL is delayed slightly, but scheduled to land at 7:05 pm.

(b) (6)

Chair, Enterprise Department of Cardiovascular Medicine
Mayo Clinic

From: "Blackburn, Scott R." <(b) (6)@va.gov>
Date: Monday, March 19, 2018 at 2:39 PM
To: (b) (6) <(b) (6)@va.gov>, (b) (6) <(b) (6)@mayo.edu>
Cc: "Windom, John H." <(b) (6)@va.gov>, Matthew Truex <(b) (6)@va.gov>, "Short, John (VACO)" <(b) (6)@va.gov>
Subject: [EXTERNAL] RE: VA EHR Call Update

Thank you, (b) (6) Dr. Moskowitz mentioned very specifically to me that we should get your perspective on cloud so that we know we have that part correct. I am thinking we cover that issue from 7:30-8pm ET before others join at 8pm.

Thank you again for the support.

Scott

From: (b) (6)
Sent: Monday, March 19, 2018 1:38 PM
To: (b) (6)
Cc: Blackburn, Scott R.; Windom, John H.; Truex, Matthew
Subject: RE: [EXTERNAL] VA EHR Call Update

(b) (6) thank you for your response. I have sent two outlook invites, one starting at 7:30PM EST for you to participate in as well as the 8PM EST with the group. Please let me know if you have any questions.

Thanks,

(b) (6)

From: (b) (6) [mailto:(b) (6)@mayo.edu]
Sent: Saturday, March 17, 2018 9:36 PM
To: (b) (6)
Cc: Blackburn, Scott R.; Windom, John H.; Truex, Matthew
Subject: Re: [EXTERNAL] VA EHR Call Update
Importance: High

Tuesday I am in Rochester, MN. Meetings 10:30-2:00 and a 4 pm flight to Atlanta.
If the call needs to be Tuesday, I have a layover in ATL 7:05-8:48 pm. Could I call in as soon as I land?
Wednesday I could make a call after 6:30 pm.

(b) (6)

From: (b) (6) <(b) (6)@va.gov>
Date: Saturday, March 17, 2018 at 12:13 PM
To: (b) (6) <(b) (6)@mayo.edu>
Cc: "Blackburn, Scott R." (b) (6)@va.gov>, "Windom, John H." (b) (6)@va.gov>, Matthew Truex (b) (6)@va.gov>
Subject: [EXTERNAL] VA EHR Call Update

Good afternoon (b) (6)

I hope you are having a nice weekend! Sorry for the extra email but we are having trouble finding a time that works for everyone. Right now, Tuesday evening seems to be the best time. If we made the call later on Tuesday starting at 5pm, 6pm, 7pm or 8pm ET would you be able to make that work?

Thanks again!

(b) (6)

(b) (6)
Executive Assistant to the Assistant Secretary
Office of Information and Technology

US Department of Veterans Affairs

Desk: (b) (6)

Cell: (b) (6)

From: Blackburn, Scott R.
Sent: 20 Mar 2018 18:17:22 -0700
To: Zenooz, Ashwini; Windom, John H.
Subject: Advisory Committee

Let's start putting this together with ASAP. I know I have thoughts and "favorites". I am sure you guys do to. My candidates (Just off top of my head).

(b) (6) [redacted] Hopkins)
(b) (6) [redacted] Sutter)
(b) (6) [redacted] UPMC)
(b) (6) [redacted] (Rush)
(b) (6) [redacted] (Mayo)
(b) (6) [redacted] (Intermountain)
(b) (6) [redacted]
(b) (6) [redacted] (Leavitt Partners)
(b) (6) [redacted] (American College of Physicians)
(b) (6) [redacted] (Cleveland Clinic)
(b) (6) [redacted] (Mass General Hospital)
Dr. Bruce Moskowitz (Tenet)
(b) (6) [redacted] (Geisinger)
(b) (6) [redacted] (New York Presbyterian)

Scott Blackburn
Executive in Charge, Office of Information & Technology
US Department of Veterans Affairs

From: Short, John (VACO)
Sent: 20 Mar 2018 23:13:31 +0000
To: Windom, John H.
Cc: Zenooz, Ashwini (b) (6); Truex, Matthew
Subject: RE: VA EHR Call Update
Attachments: Cerner_VA_Interoperability_Response_v1.docx
Importance: High

JW – Response attached for your review. I wasn't sure if you wanted to send this over to Scott at this time, so this is going out minus him for the moment.

Also, our fax capability will have indexing, which she has not, apparently, experienced, but believes that is critical to patient safety.

BTW – I have lost almost all of my voice... ☹

From: Windom, John H.
Sent: Tuesday, March 20, 2018 5:30 PM
To: Short, John (VACO); Blackburn, Scott R.
Cc: Zenooz, Ashwini; (b) (6); Truex, Matthew
Subject: RE: VA EHR Call Update

All of this is in our contract and being done in phases.

Jw

Sent with Good (www.good.com)

From: Short, John (VACO)
Sent: Tuesday, March 20, 2018 2:24:14 PM
To: Blackburn, Scott R.; Windom, John H.
Subject: RE: VA EHR Call Update

On Day one of GoLive we will have the ability to parse many portions of all the Community Care CCD and CCDAs directly into the Cerner Millennium EHR.

I'll have the details for you shortly.

From: Blackburn, Scott R.
Sent: Tuesday, March 20, 2018 5:13 PM
To: Short, John (VACO); Windom, John H.
Subject: FW: [EXTERNAL] RE: VA EHR Call Update

Thoughts?

Cerner Clarification on Advanced Interoperability

Overview

Cerner recognizes the need to have a multi-faceted approach to interoperability and integrating data through seamless or manual processes. Our solutions support all types of Continuity of Care Document (CCD) ingestion use cases including various forms of digital and manual faxing workflows. These solutions as well as the compliance with industry standards that support them have been included in the existing Performance Work Statement (PWS) provided to the Department of Veterans Affairs (VA).

Clarification of Cerner Advanced Interoperability Capabilities

Cerner has committed to providing the VA Advanced Interoperability solutions, which include enhanced CCD parsing that involves extracting data from the CCD and discretely reconciling it into the Millennium record. These capabilities are outlined in the following sections of the existing PWS and were clarified by the MITRE Interoperability Assessment:

- In section 5.10.5 of the RFP: "m) The Contractor shall conduct an annual Interoperability Self-Assessment against standards that shall be specified by the VA, such as those promulgated by HIMSS or future standards to be identified by VA."
- In section 5.10.4(m) of the RFP: "The annual self-assessment will report on the state of each data element (e.g., which are supported in what capacities and in which formats). This will help assure standards implementation consistency and assure standards compliance with evolving national standards."
- In section 5.5.1 of the RFP: "j) The Contractor shall enable configuration of the application that supports external community data without requiring the clinician to go to special screens to see and use reconciled external data. By IOC entry, the Contractor shall support incorporation of the following external community data domains, including but not limited to these domains and sub-domains:
 - Problems
 - Allergies
 - Home Medications
 - Procedures - including associated reports and with appropriately filtered CPT codes
 - Immunizations
 - Discharge Summaries
 - Progress Notes
 - Consult Notes
 - History & Physicals
 - Operative Notes
 - Radiology and Diagnostic Reports (Into "Documentation" component)

By IOC exit, the Contractor shall support incorporation of the following external community data domains, including but not limited to these domains and sub-domains:

- Results
 - Labs (General, Pathology, Microbiology)

- Vitals
 - Radiology and Diagnostic Reports (Into “Diagnostic Report” component)
 - Images”

To clarify capabilities on faxing, Cerner has committed to providing Remote Report Distribution (RRD) which is the Cerner automated fax solution. In the cases of manual faxed documents Cerner ProVision Document Imaging (CPDI) supports a scanned document workflow. With these solutions, the VA will be able to attach documents to a patient’s record at the person or encounter level with an associated document type, which will provide indexing to that content.

From: (b) (6)
Sent: 20 Mar 2018 22:04:17 +0000
To: VA CIO Executive Schedule; Blackburn, Scott R.; Windom, John H.; Truex, Matthew; Bruce Moskowitz (b) (6) @Bruce Moskowitz, MD'; Marc Sherman; IP; (b) (6) (b) (6)
(b) (6)
(b) (6)
Cc: (b) (6)
Subject: [EXTERNAL] RE: VA EHR Call

Dear (b) (6)

I will be taking the call from my car as I drive from NY to Boston. I reviewed the documents and I have two lingering questions that I may figure out between now and our call, but I thought that I would send along while I still had email access:

1. How do users who are on the legacy system see data that will be in the new EHRM/Cerner product (during the transition phase; as some VA users will be on the legacy system and others will be on the new system)
2. Do we have a list of the actual medical devices for which there will be device data integration? (I tried to find that list, but cannot seem to find it on review.)

I look forward to joining the call at 8pm.

Thanks and best,

(b) (6)

-----Original Appointment-----

From: VA CIO Executive Schedule [mailto:(b) (6)@va.gov]

Sent: Sunday, March 18, 2018 2:32 PM

To: VA CIO Executive Schedule; Blackburn, Scott R.; Windom, John H.; Truex, Matthew; Bruce Moskowitz; (b) (6) @Bruce Moskowitz, MD'; Marc Sherman; IP; (b) (6)

(b) (6)

(b) (6)

Cc: (b) (6)

Subject: VA EHR Call

When: Tuesday, March 20, 2018 8:00 PM-9:30 PM (UTC-05:00) Eastern Time (US & Canada).

Where: (b) (6), (b) (5)

Scheduling POC: (b) (6)@va.gov

All, I am including everyone in the group in case anyone has any last minute scheduling changes. Thanks,

(b) (6)

The information in this e-mail is intended only for the person to whom it is addressed. If you believe this e-mail was sent to you in error and the e-mail contains patient information, please contact the Partners Compliance HelpLine at <http://www.partners.org/complianceline>. If the e-mail was sent to you in error but does not contain patient information, please contact the sender and properly dispose of the e-mail.

From: Bruce Moskowitz
Sent: 19 Mar 2018 17:59:25 -0400
To: Blackburn, Scott R.
Cc: Marc Sherman; Windom, John H.; (b) (6)
Subject: [EXTERNAL] Re: (b) (6) - Cloud expertise

Perfect

Sent from my iPad
Bruce Moskowitz M.D.

On Mar 19, 2018, at 2:45 PM, Blackburn, Scott R. <(b) (6)@va.gov> wrote:

FYI. (b) (6) time tomorrow night is limited (he will be in between flights). Given he is a "single issue" guy; we are going to start the call at 7:30 and cover the Cloud issue from 7:30-8pm ET before everyone else joins at 8pm ET. I think we will have everyone except (b) (6) and (b) (6) on the call. (b) (6) is working a time on Wednesday to get them on a call.

Scott

From: Blackburn, Scott R.
Sent: Monday, March 19, 2018 2:40 PM
To: (b) (6); (b) (6)
Cc: Windom, John H.; Truex, Matthew; Short, John (VACO)
Subject: RE: [EXTERNAL] VA EHR Call Update

Thank you, (b) (6) Dr. Moskowitz mentioned very specifically to me that we should get your perspective on cloud so that we know we have that part correct. I am thinking we cover that issue from 7:30-8pm ET before others join at 8pm.

Thank you again for the support.
Scott

From: (b) (6)
Sent: Monday, March 19, 2018 1:38 PM
To: (b) (6)
Cc: Blackburn, Scott R.; Windom, John H.; Truex, Matthew
Subject: RE: [EXTERNAL] VA EHR Call Update

(b) (6) thank you for your response. I have sent two outlook invites, one starting at 7:30PM EST for you to participate in as well as the 8PM EST with the group. Please let me know if you have any questions.

Thanks,
(b) (6)

From: (b) (6) [mailto:(b) (6)@mayo.edu]
Sent: Saturday, March 17, 2018 9:36 PM

From: Windom, John H.
Sent: 18 Mar 2018 12:06:48 +0000
To: Zenooz, Ashwini; Short, John (VACO)
Subject: FW: [EXTERNAL] Re: EHR VA Call

These are only a fraction of the emails and I still don't know what time the meeting will be. You will love this one.

Sent with Good (www.good.com)

From: Bruce Moskowitz
Sent: Thursday, March 15, 2018 10:27:32 AM
To: Windom, John H.; Blackburn, Scott R.; Truex, Matthew
Cc: (b) (6) @gmail.com; IP; O'Rourke, Peter M.
Subject: [EXTERNAL] Re: EHR VA Call

I want to make sure we are all in agreement of how this is structured. Marc and I want to be on every call that the group is on to discuss the contract. The whole group needs to be on the same call so we all give input to the whole contract and hear the same considerations and comments. Let me know if there is any discrepancy to this. Thank you

Sent from my iPad
Bruce Moskowitz M.D.

On Mar 15, 2018, at 12:28 PM, VA CIO Executive Schedule (b) (6) @va.gov> wrote:

<mime-attachment.ics>

From: Windom, John H.
Sent: 18 Mar 2018 05:04:25 -0700
To: Zenooz, Ashwini; Short, John (VACO)
Subject: FW: [EXTERNAL] Re: EHR VA Call

Sent with Good (www.good.com)

From: Marc Sherman
Sent: Thursday, March 15, 2018 12:34:27 PM
To: (b) (6) @Bruce Moskowitz, MD
Cc: (b) (6) Truex, Matthew; Windom, John H.
Subject: Re: FW: [EXTERNAL] Re: EHR VA Call

I am available on Monday March 19th at either noon or at 4pm (but only until 6 p.m) and on Tuesday March 20th at 4 p.m. (but not at noon).

Marc Sherman

(b) (6)

On Mar 15, 2018 12:04 PM, (b) (6) @Bruce Moskowitz, MD"
<(b) (6) @gmail.com> wrote:

Dr. Moskowitz prefers to keep the calls at Noon or 4:00 pm. He would be available Monday (3/19) or Tuesday(3/20) at those times.

On Thu Mar 15 2018 at 2:27 PM, (b) (6)
(b) (6) @va.gov> wrote:

Good afternoon,

Per Dr. Moskowitz we are looking to get all 7 folks on a call at the same time. Would you be able to tell me what times are available on Monday afternoon, Tuesday before 1PM or Wednesday? I will go from there.

Thanks, (b) (6)

From: Bruce Moskowitz
Sent: Thursday, March 15, 2018 1:27:32 PM
To: Windom, John H.; Blackburn, Scott R.; Truex, Matthew

Cc: (b) (6)@gmail.com; IP; O'Rourke, Peter M.
Subject: [EXTERNAL] Re: EHR VA Call

I want to make sure we are all in agreement of how this is structured. Marc and I want to be on every call that the group is on to discuss the contract. The whole group needs to be on the same call so we all give input to the whole contract and hear the same considerations and comments. Let me know if there is any discrepancy to this. Thank you

Sent from my iPad

Bruce Moskowitz M.D.

On Mar 15, 2018, at 12:28 PM, VA CIO Executive Schedule <(b) (6)@va.gov> wrote:

<mime-attachment.ics>

--

(b) (6)
Patient Care Coordinator
Dr. Bruce Moskowitz, MD
Victor Farris Medical Building
1411 North Flagler Drive
(b) (6)
West Palm Beach, FL 33401
Phone: (b) (6)
Fax: (b) (6)

From: Windom, John H.
Sent: 18 Mar 2018 04:45:33 -0700
To: Zenooz, Ashwini; Short, John (VACO)
Subject: FW: [EXTERNAL] RE: Scheduling a Call Regarding Feedback on VA EHR

Sent with Good (www.good.com)

From: (b) (6)
Sent: Friday, March 16, 2018 4:18:29 PM
To: (b) (6)
(b) (6)
Cc: Blackburn, Scott R.; Windom, John H.; Truex, Matthew
Subject: [EXTERNAL] RE: Scheduling a Call Regarding Feedback on VA EHR

(b) (6)
The best date for me is Monday 3/19 at 4PM EST. Thanks, (b) (6)

From: (b) (6)@va.gov]
Sent: Friday, March 16, 2018 5:12 PM
To: (b) (6)@imail.org>; (b) (6)@mayo.edu>;
(b) (6)@mgh.harvard.edu>; (b) (6)
(b) (6)@upmc.edu>; (b) (6)@gmail.com>
Cc: Blackburn, Scott R. <(b) (6)@va.gov>; Windom, John H. <(b) (6)@va.gov>;
Truex, Matthew <(b) (6)@va.gov>
Subject: RE: Scheduling a Call Regarding Feedback on VA EHR
Importance: High

WARNING: Stop. Think. Read. This is an external email.

Good evening,

Another friendly reminder to please let me know which dates works best for your schedule.

Have a great evening,

(b) (6)

From: (b) (6)
Sent: Friday, March 16, 2018 1:06 PM
To: (b) (6) | (b) (6) | (b) (6)@facs.org | (b) (6)
(b) (6)
Cc: Blackburn, Scott R.; Windom, John H.; Truex, Matthew; 'Bruce Moskowitz'; (b) (6)@Bruce
(b) (6) Marc Sherman'; 'IP'
Subject: RE: Scheduling a Call Regarding Feedback on VA EHR
Importance: High

Good afternoon,

A friendly reminder to please let me know which date works best for your schedule. Please feel free to call me with any questions.

Thank you,

(b) (6)

From: (b) (6)
Sent: Thursday, March 15, 2018 7:27 PM
To: (b) (6); (b) (6)@facs.org; (b) (6)
(b) (6)
Cc: Blackburn, Scott R.; Windom, John H.; Truex, Matthew; Bruce, Moskowitz; (b) (6)@Bruce
(b) (6) Marc Sherman; IP
Subject: Scheduling a Call Regarding Feedback on VA EHR

Good evening,

We would like to schedule a call in the next few days to share feedback on the VA EHR contract. I have been corresponding with many of you on different dates and times next week, but we are going to schedule the call for either Sunday 3/18 at 4PM EST, Monday 3/19 at 4PM EST or Tuesday 3/20 at 4PM EST. Please let me know which date will work best for your schedule. Feel free to call me with any questions and I look forward to hearing from you.

Thank you,

(b) (6)

(b) (6)
Executive Assistant to the Assistant Secretary
Office of Information and Technology
US Department of Veterans Affairs
Desk: (b) (6)
Cell: (b) (6)

From: Windom, John H.
Sent: 16 Mar 2018 12:09:55 +0000
To: Truex, Matthew; Foster, Michele (SES)
Cc: (b) (6)
Subject: RE: [EXTERNAL] Re: Scheduling a Call Regarding Feedback on VA EHR

Matt,

I can assure you that there is no new funding news. You do know that Congressmen Dent put \$800M in our FY18 funding line as part of the March 23rd appropriation, and told Shulkin that they no longer need a transfer letter? We will see how it plays out. I do not want to award at \$4.3M, but thanks for the heads up.

JW

John H. Windom, Senior Executive Service (SES)
Program Executive for Electronic Health Record Modernization (PEO EHRM)
Special Advisor to the Under Secretary for Health
811 Vermont Avenue NW (b) (6)
Washington, DC 20420
(b) (6)@va.gov
Office: (b) (6)
Mobile: (b) (6)
Executive Assistant: (b) (6) – Appointments and Scheduling
(b) (6)@va.gov Office: (b) (6)

From: Truex, Matthew
Sent: Friday, March 16, 2018 7:53 AM
To: Windom, John H.; Foster, Michele (SES)
Cc: (b) (6)
Subject: RE: [EXTERNAL] Re: Scheduling a Call Regarding Feedback on VA EHR

Thanks John. Relative to being ready to award once funding is received, are we talking about after the budget is approved and the EHRM appropriation is established, or are we talking about the \$4.5m John Short is aligning out of OI&T funds to award the Basic IDIQ and Task Order 2 only?

My team has the Congressional Notifications and FBO award notices drafted to cover the award scenarios. The Congressional Award Notification is usually submitted one business day prior to the award being announced, we will be sure to coordinate with our Congressional Liaisons as we did with the D&F notification. To avoid any delays, it is imperative that my team be apprised of the latest news regarding funding availability, authorization to proceed, etc.

Have any VA press releases been prepared for the award, or coordination of post-award communications strategy with Cerner?

Thanks,

Matt

Matthew Truex
Contracting Officer
Department of Veterans Affairs
Office of Procurement, Acquisition and Logistics
Technology Acquisition Center
23 Christopher Way
Eatontown, New Jersey 07724
Office: (b) (6)
Mobile: (b) (6)
e-mail: (b) (6)@va.gov



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From: Windom, John H.
Sent: Friday, March 16, 2018 7:24 AM
To: Truex, Matthew; Foster, Michele (SES)
Subject: FW: [EXTERNAL] Re: Scheduling a Call Regarding Feedback on VA EHR

FYI below. I have been in constant communication with Mr. Blackburn. Please see below. I think we are tracking. Let's be ready to sign this thing as soon as funding is in our account. Thank you.
V/r,
John

John H. Windom, Senior Executive Service (SES)
Program Executive for Electronic Health Record Modernization (PEO EHRM)
Special Advisor to the Under Secretary for Health
811 Vermont Avenue NW (b) (6)
Washington, DC 20420
(b) (6)@va.gov
Office: (b) (6)
Mobile: (b) (6)
Executive Assistant: (b) (6) – Appointments and Scheduling
(b) (6)@va.gov Office: (b) (6)

From: Blackburn, Scott R.
Sent: Thursday, March 15, 2018 8:45 PM
To: DJS; Windom, John H.; Bowman, Thomas
Subject: FW: [EXTERNAL] Re: Scheduling a Call Regarding Feedback on VA EHR

We are pushing to get this done no later than Tuesday so we can wrap this up. Talked to Bruce and we are perfectly aligned. He is going to help push these folks for us.

Sent with Good (www.good.com)

From: Bruce Moskowitz
Sent: Thursday, March 15, 2018 7:27:17 PM
To: Callaghan, Elizabeth
Cc: (b) (6) @facs.org; (b) (6)
(b) (6) Blackburn, Scott R.; Windom, John H.; Truex, Matthew; (b) (6) @Bruce Moskowitz,MD; (b) (6) Marc Sherman; IP
Subject: [EXTERNAL] Re: Scheduling a Call Regarding Feedback on VA EHR

All work for me

Sent from my iPad
Bruce Moskowitz M.D.

On Mar 15, 2018, at 7:26 PM, (b) (6) @va.gov> wrote:

Good evening,

We would like to schedule a call in the next few days to share feedback on the VA EHR contract. I have been corresponding with many of you on different dates and times next week, but we are going to schedule the call for either Sunday 3/18 at 4PM EST, Monday 3/19 at 4PM EST or Tuesday 3/20 at 4PM EST. Please let me know which date will work best for your schedule. Feel free to call me with any questions and I look forward to hearing from you.

Thank you,

(b) (6)

(b) (6)

Executive Assistant to the Assistant Secretary
Office of Information and Technology
US Department of Veterans Affairs
Desk: (b) (6)
Cell: (b) (6)

From: Zenooz, Ashwini
Sent: 15 Mar 2018 19:23:45 +0000
To: A Zenooz
Subject: FW: [EXTERNAL] Re: EHR VA Call

-Ash

Ashwini Zenooz, MD
Chief Medical Officer
Electronic Health Record Modernization
Department of Veterans Affairs
O: (b) (6)
Assistant: (b) (6)@va.gov
Web: <https://vaww.ehrm.va.gov/>

From: Windom, John H.
Sent: Thursday, March 15, 2018 3:23 PM
To: Zenooz, Ashwini
Subject: FW: [EXTERNAL] Re: EHR VA Call

It's about the Veterans?

Sent with Good (www.good.com)

From: (b) (6)@Bruce Moskowitz, MD
Sent: Thursday, March 15, 2018 12:03:58 PM
To: (b) (6)
Cc: Marc Sherman; Truex, Matthew; Windom, John H.
Subject: Re: FW: [EXTERNAL] Re: EHR VA Call

Dr. Moskowitz prefers to keep the calls at Noon or 4:00 pm. He would be available Monday (3/19) or Tuesday(3/20) at those times.

On Thu, Mar 15, 2018 at 2:27 PM, (b) (6)@va.gov> wrote:
Good afternoon,

Per Dr. Moskowitz we are looking to get all 7 folks on a call at the same time. Would you be able to tell me what times are available on Monday afternoon, Tuesday before 1PM or Wednesday? I will go from there.

Thanks (b) (6)

From: (b) (6)
Sent: 15 Mar 2018 13:33:54 -0500
To: Windom, John H.
Subject: RE: [EXTERNAL] Re: EHR VA Call

Okay, great. This is going to be interesting.

From: Windom, John H.
Sent: Thursday, March 15, 2018 2:33 PM
To: (b) (6)
Subject: RE: [EXTERNAL] Re: EHR VA Call

(b) (6)

Don't worry about me. Just book it and I will adjust anything in my schedule accordingly.
Thanks for your efforts. Don't know how you remain sane.
Jw

Sent with Good (www.good.com)

From: (b) (6)
Sent: Thursday, March 15, 2018 11:27:32 AM
To: (b) (6) @Bruce Moskowitz, MD; Marc Sherman
Cc: Truex, Matthew; Windom, John H.
Subject: FW: [EXTERNAL] Re: EHR VA Call

Good afternoon,

Per Dr. Moskowitz we are looking to get all 7 folks on a call at the same time. Would you be able to tell me what times are available on Monday afternoon, Tuesday before 1PM or Wednesday? I will go from there.

Thanks, (b) (6)

From: Bruce Moskowitz
Sent: Thursday, March 15, 2018 1:27:32 PM
To: Windom, John H.; Blackburn, Scott R.; Truex, Matthew
Cc: (b) (6) @gmail.com; IP; O'Rourke, Peter M.
Subject: [EXTERNAL] Re: EHR VA Call

I want to make sure we are all in agreement of how this is structured. Marc and I want to be on every call that the group is on to discuss the contract. The whole group needs to be on the same call so we all give input to the whole contract and hear the same considerations and comments. Let me know if there is any discrepancy to this. Thank you

Sent from my iPad
Bruce Moskowitz M.D.

From: Windom, John H.
Sent: 15 Mar 2018 18:01:17 +0000
To: Truex, Matthew
Cc: Foster, Michele (SES)
Subject: FW: [EXTERNAL] Re: EHR VA Call

Matt
Not yours or my place to respond to this direction.
Thx
John

Sent with Good (www.good.com)

From: Bruce Moskowitz
Sent: Thursday, March 15, 2018 10:27:32 AM
To: Windom, John H.; Blackburn, Scott R.; Truex, Matthew
Cc: (b) (6)@gmail.com; IP; O'Rourke, Peter M.
Subject: [EXTERNAL] Re: EHR VA Call

I want to make sure we are all in agreement of how this is structured. Marc and I want to be on every call that the group is on to discuss the contract. The whole group needs to be on the same call so we all give input to the whole contract and hear the same considerations and comments. Let me know if there is any discrepancy to this. Thank you

Sent from my iPad
Bruce Moskowitz M.D.

On Mar 15, 2018, at 12:28 PM, VA CIO Executive Schedule <(b) (6)@va.gov> wrote:

<mime-attachment.ics>

On Mar 13, 2018 2:04 PM, "Blackburn, Scott R."

<(b) (6)@va.gov> wrote:

Marc/Bruce/Ike – thank you so much for the prompt replies. I just spoke to Bruce. We've got 100% participation ((b) (6) (b) (6)) and we are moving forward. Matt Truex (cc'd, our contracting officer) is making sure everyone has the right material. ((b) (6)) my assistant, cc'd here) will be organizing a few phone calls in 2 steps:

Step 1 – Basic orientation to the government contract structure. This will be a 30-45 minute orientation so that folks know what they are looking at. John Windom and Matt Truex will host this and clue people into the parts to focus on and parts that are standard government things that are less relevant. This can be done in groups (ideally) or in one-offs to fit to accommodate people's busy schedules. ((b) (6)) has already scheduled 2 times in case these work for you. If they do not, she will work with your schedulers to find other times in the next 24-48 hours (sooner the better).

- Thursday 8:30-9:15am ET – ((b) (6)) confirmed
- Thursday 11:30am-12:15pm ET – ((b) (6)) confirmed

Step 2 – Feedback calls. Per Bruce's idea, we'll schedule 2 separate feedback calls for early next week. Both 90 minutes each. We are aiming for Monday, Tuesday or Wednesday at the latest. ((b) (6)) will set these up.

- CIOs ((b) (6)) – and of course each of you are encouraged to join)
- Doctors ((b) (6)) – and of course each of you are encouraged to join)

Let me know how this sounds. Thank you again for your support and assistance on this critical matter.

Scott

From: Marc Sherman [mailto:(b) (6)@gmail.com]
Sent: Tuesday, March 13, 2018 1:40 PM
To: Blackburn, Scott R.
Cc: IP; (b) (6)@gmail.com; Bruce Moskowitz; Truex, Matthew; Windom, John H.; DJS
Subject: [EXTERNAL] Re: VA EHR NDA

Scott, Matt and John

Thank you for the NDA draft that you sent along and the organized approach. I have attached the following to close the loop:

1. a marked up version of the NDA with a few necessary adjustments in red-line so you can see the changes that were made,
2. a blank copy of the amended NDA for Bruce and Ike to sign, and
3. a signed version by me of the amended NDA.

Thanks and happy to help as requested.

Marc

On Tue, Mar 13, 2018 at 10:31 AM, Blackburn, Scott R.
<(b) (6)@va.gov> wrote:

Ike, Bruce, Marc:

Thank each of you for agreeing to lend an extra set of outside eyes on the EHR contract. We appreciate your support and want to make sure we get to the best place possible for Veterans, the country and taxpayers. As we

are incredibly grateful to you for volunteering your time, we want to make this as easy as possible for you. Here are 3 next steps.

- 1) We will need you to sign the attached NDA. Please return to Matt Truex (cc'd).
- 2) Matt will then send you the latest package under separate cover.
- 3) Given government contracts are different than what you are used to reading, we would propose a quick phone call so that we can orient you to the contract and help focus you on the parts where your expertise will be most valuable. Matt Truex (who is the government contracting officer) and John Windom (who is our EHR leader) will lead this from our side. I will ask (b) (6) (cc'd) here to help set up a time. We can either do this all together, if calendars match up, or separately if need be.

We have also connected with (b) (6) (b) (6) who all have all received the NDA and we are working with them. I am hoping to connect with (b) (6) today.

Thanks again!

Scott

Scott Blackburn

Acting CIO & Executive-in-Charge, Office of Information & Technology

Department of Veterans Affairs

From: Bruce Moskowitz
Sent: 15 Mar 2018 10:51:08 -0400
To: Windom, John H.;Blackburn, Scott R.
Cc: IP;(b) (6)@gmail.com
Subject: [EXTERNAL] EMR documents

I still have not received the EMR documents to review. You have my NDA. Please send ASAP. I am a reasonable speed reader so you can include all pages.

Sent from my iPad
Bruce Moskowitz M.D.

From: Blackburn, Scott R.
Sent: 15 Mar 2018 07:32:17 -0700
To: Windom, John H.;Zenooz, Ashwini;Short, John (VACO)
Subject: FW: [EXTERNAL] EMR calls

-----Original Message-----

From: Bruce Moskowitz [mailto:(b) (6)@mac.com]
Sent: Thursday, March 15, 2018 9:52 AM
To: Blackburn, Scott R.
Cc: IP; (b) (6)@gmail.com; O'Rourke, Peter M.
Subject: Re: [EXTERNAL] EMR calls

Thank you this is important information. I can walk everyone through the device registry and the nutritional platform.

The critical area that is the main part of your due diligence which is much appreciated is remote patient monitoring. This will be the hospital platform of the very near future for the VA and is already well done in the private sector. (b) (6) CIO at Mayo made a good point that the contract should not tie the VA to only this vendor for this important function. This technology is getting better at an accelerated pace. We could get stuck with a platform that is outdated and the contract will not allow us to innovate with another platform.

Sent from my iPad
Bruce Moskowitz M.D.

> On Mar 15, 2018, at 9:24 AM, Blackburn, Scott R. <(b) (6)@va.gov> wrote:

>

> Bruce, thanks for raising this. Below is what I learned about what we have for intensive care units interacting with a central monitoring system. Let me know if this sounds right to you. Also you rattled off a couple of things (nutritional layout from Tufts, field to input the serial number for items in the device registry); if you could send me those I can hunt those down as well to save time. I just got off the phone with (b) (6) and she is excited to help; speaking to a few others at 11:30am ET.

>

> The Cerner solution for ICU central monitoring, as part of the VA EHR, utilizes Cerner's CareAware iAware framework through the Apache Outcomes solution. This solution has the capability to configure dashboard views to enable monitoring of high acuity areas, specifically around performance and patient care. This capability is included in the scope of the Cerner acquisition as the Critical Care System, Cerner Apache Outcomes solution and End User License Agreement.

>

> Does this capability also monitors emergency rooms, recovery rooms and telemetry beds?

> The current acquisition solutions meet these requirements and can be configured into a central command center model.

> * Emergency Room: Emergency Department (ED) Dashboard is built into the Emergency Department Care Management to monitor progression of patients through the patient care process. This solution has been included as an Emergency Medicine System and End User License Agreement.

> * Recovery Room: Surgical Management solution has tracking boards to monitor patient progress and efficiency of care provided. This solution has been included as Perioperative System and End User License Agreement.

> * Telemetry Beds: Traditional central monitoring systems as are used in telemetry, exist within the VA's current environment. During the acquisition process it was decided that these solutions will persist into the future state to reduce costs for the VA. However, the acquisition includes integration of this capability.

>
> In addition to these monitoring capabilities, CareAware Patient Flow, which is Cerner's capacity management solution that helps to operationalize patient care activities such as room cleaning offers specific dashboards that can be centralized to support a central command center model.
>
>
> -Scott
>
> -----Original Message-----
> From: Bruce Moskowitz [mailto:(b) (6)@mac.com]
> Sent: Wednesday, March 14, 2018 12:18 PM
> To: Blackburn, Scott R.
> Subject: [EXTERNAL] EMR calls
>
> To save time can you tell me if the Cerner contract has a provision to have the EMR that is in Intensive care units interact with a central monitoring system? Currently all major institutions have a command and control center staff that monitors intensive care units located in different hospitals in their system. The future is expanding this to monitor emergency rooms, recovery rooms and telemetry beds. If it is not in place which should be a standard part of the contract we will have billions in further costs to the system.
>
> Sent from my iPad
> Bruce Moskowitz M.D.

From: Blackburn, Scott R.
Sent: 15 Mar 2018 06:25:08 -0700
To: Short, John (VACO);Zenooz, Ashwini
Cc: Windom, John H.
Subject: RE: [EXTERNAL] EMR calls

Thanks. I passed this on.

From: Short, John (VACO)
Sent: Wednesday, March 14, 2018 8:45 PM
To: Zenooz, Ashwini
Cc: Blackburn, Scott R.; Windom, John H.
Subject: RE: [EXTERNAL] EMR calls

Ash – Take a look at this DRAFT Response.

Cerner's proposed solution for ICU central monitoring, as part of the VA EHR, utilizes Cerner's CareAware iAware framework through the Apache Outcomes solution. This solution has the capability to configure dashboard views to enable monitoring of high acuity areas, specifically around performance and patient care. This capability is included in the scope of the Cerner acquisition as the Critical Care System, Cerner Apache Outcomes solution and End User License Agreement.

Does this capability also monitors emergency rooms, recovery rooms and telemetry beds? The current acquisition solutions meet these requirements and can be configured into a central command center model.

- **Emergency Room:** Emergency Department (ED) Dashboard is built into the Emergency Department Care Management to monitor progression of patients through the patient care process. This solution has been included as an Emergency Medicine System and End User License Agreement.
- **Recovery Room:** Surgical Management solution has tracking boards to monitor patient progress and efficiency of care provided. This solution has been included as Perioperative System and End User License Agreement.
- **Telemetry Beds:** Traditional central monitoring systems as are used in telemetry, exist within the VA's current environment. During the acquisition process it was decided that these solutions will persist into the future state to reduce costs for the VA. However, the acquisition includes integration of this capability.

In addition to these monitoring capabilities, CareAware Patient Flow, which is Cerner's capacity management solution that helps to operationalize patient care activities such as room cleaning offers specific dashboards that can be centralized to support a central command center model.

From: Windom, John H.
Sent: Wednesday, March 14, 2018 7:00 PM
To: Zenooz, Ashwini; Blackburn, Scott R.; Short, John (VACO)
Subject: RE: [EXTERNAL] EMR calls

I would it make the response overly complex.
Jw

Sent with Good (www.good.com)

From: Zenooz, Ashwini
Sent: Wednesday, March 14, 2018 3:44:50 PM
To: Windom, John H.; Blackburn, Scott R.; Short, John (VACO)
Subject: RE: [EXTERNAL] EMR calls

John Short and I are working on a response. He should have something back from John Short by 8p. Thx

Sent with Good (www.good.com)

From: Windom, John H.
Sent: Wednesday, March 14, 2018 3:31:07 PM
To: Blackburn, Scott R.; Zenooz, Ashwini; Short, John (VACO)
Subject: RE: [EXTERNAL] EMR calls

Ash
Did you closeout this request from Mr Blackburn? I was not copied on anything. This is a doctor to doctor tasking.
Thx
Jw

Sent with Good (www.good.com)

From: Blackburn, Scott R.
Sent: Wednesday, March 14, 2018 9:55:20 AM
To: Zenooz, Ashwini; Windom, John H.; Short, John (VACO)
Subject: RE: [EXTERNAL] EMR calls

Thanks. Can you guys write me a short response to Bruce that I can cut/paste? I want to nip these things in the bud so we can get this damn thing over the goalline! It is crunch time.

From: Zenooz, Ashwini
Sent: Wednesday, March 14, 2018 12:54 PM
To: Windom, John H.; Blackburn, Scott R.; Short, John (VACO)
Subject: RE: [EXTERNAL] EMR calls

That is correct. Through LightsOn and system config we would be able to view enterprise wide ICU, ED activity etc. at a central command.

Sent with Good (www.good.com)

From: Windom, John H.
Sent: Wednesday, March 14, 2018 9:50:28 AM
To: Blackburn, Scott R.; Short, John (VACO); Zenooz, Ashwini
Subject: RE: [EXTERNAL] EMR calls

This is part of contract and standard EHR implementation practices/solutions. The team will validate.

John

Sent with Good (www.good.com)

From: Blackburn, Scott R.
Sent: Wednesday, March 14, 2018 9:37:42 AM
To: Windom, John H.; Short, John (VACO); Zenooz, Ashwini
Subject: FW: [EXTERNAL] EMR calls

-----Original Message-----

From: Bruce Moskowitz [mailto:[\(b\) \(6\)@mac.com](mailto:(b) (6)@mac.com)]
Sent: Wednesday, March 14, 2018 12:18 PM
To: Blackburn, Scott R.
Subject: [EXTERNAL] EMR calls

To save time can you tell me if the Cerner contract has a provision to have the EMR that is in Intensive care units interact with a central monitoring system? Currently all major institutions have a command and control center staff that monitors intensive care units located in different hospitals in their system. The future is expanding this to monitor emergency rooms, recovery rooms and telemetry beds. If it is not in place which should be a standard part of the contract we will have billions in further costs to the system.

Sent from my iPad
Bruce Moskowitz M.D.

From: Zenooz, Ashwini
Sent: 14 Mar 2018 19:52:19 -0500
To: Short, John (VACO)
Cc: Blackburn, Scott R.; Windom, John H.
Subject: RE: [EXTERNAL] EMR calls

Thanks. This looks accurate.

Sent with Good (www.good.com)

From: Short, John (VACO)
Sent: Wednesday, March 14, 2018 5:44:58 PM
To: Zenooz, Ashwini
Cc: Blackburn, Scott R.; Windom, John H.
Subject: RE: [EXTERNAL] EMR calls

Ash – Take a look at this DRAFT Response.

Cerner's proposed solution for ICU central monitoring, as part of the VA EHR, utilizes Cerner's CareAware iAware framework through the Apache Outcomes solution. This solution has the capability to configure dashboard views to enable monitoring of high acuity areas, specifically around performance and patient care. This capability is included in the scope of the Cerner acquisition as the Critical Care System, Cerner Apache Outcomes solution and End User License Agreement.

Does this capability also monitors emergency rooms, recovery rooms and telemetry beds?

The current acquisition solutions meet these requirements and can be configured into a central command center model.

- **Emergency Room:** Emergency Department (ED) Dashboard is built into the Emergency Department Care Management to monitor progression of patients through the patient care process. This solution has been included as an Emergency Medicine System and End User License Agreement.
- **Recovery Room:** Surgical Management solution has tracking boards to monitor patient progress and efficiency of care provided. This solution has been included as Perioperative System and End User License Agreement.
- **Telemetry Beds:** Traditional central monitoring systems as are used in telemetry, exist within the VA's current environment. During the acquisition process it was decided that these solutions will persist into the future state to reduce costs for the VA. However, the acquisition includes integration of this capability.

In addition to these monitoring capabilities, CareAware Patient Flow, which is Cerner's capacity management solution that helps to operationalize patient care activities such as room cleaning offers specific dashboards that can be centralized to support a central command center model.

From: Windom, John H.
Sent: Wednesday, March 14, 2018 7:00 PM
To: Zenooz, Ashwini; Blackburn, Scott R.; Short, John (VACO)
Subject: RE: [EXTERNAL] EMR calls

I would it make the response overly complex.
Jw

Sent with Good (www.good.com)

From: Zenooz, Ashwini
Sent: Wednesday, March 14, 2018 3:44:50 PM
To: Windom, John H.; Blackburn, Scott R.; Short, John (VACO)
Subject: RE: [EXTERNAL] EMR calls

John Short and I are working on a response. He should have something back from John Short by 8p. Thx

Sent with Good (www.good.com)

From: Windom, John H.
Sent: Wednesday, March 14, 2018 3:31:07 PM
To: Blackburn, Scott R.; Zenooz, Ashwini; Short, John (VACO)
Subject: RE: [EXTERNAL] EMR calls

Ash
Did you closeout this request from Mr Blackburn? I was not copied on anything. This is a doctor to doctor tasking.
Thx
Jw

Sent with Good (www.good.com)

From: Windom, John H.
Sent: 14 Mar 2018 18:03:24 +0000
To: (b) (6)
Subject: RE: [EXTERNAL] EMR calls

Thx.
Jw

Sent with Good (www.good.com)

From: (b) (6)
Sent: Wednesday, March 14, 2018 10:57:08 AM
To: Windom, John H.
Cc: (b) (6)
Subject: RE: [EXTERNAL] EMR calls

FYI on our answer below.

From: (b) (6)
Sent: Wednesday, March 14, 2018 1:40 PM
To: (b) (6)@CERNER.COM>; (b) (6)@cerner.com>
Subject: Re: [EXTERNAL] EMR calls

We will be connecting to bedside medical devices in the icu. We traditionally keep central monitoring systems that exist today but care aware iware can also serve for central monitoring. We have icu's in scope for smart pumps which includes iaware but have not expanded that scope to include telemetry and EDs. Net net, we would use whatever systems are in place for central monitoring if they choose not to use iaware for such locations.

I also think it would be safe to say coat is contained and should not be any outside of current acquisition costs that are planned for in the case described below.

(b) (6)
Vice President & Chief Medical Officer
Physician Alignment Organization
(b) (6)@Cerner.com
C: (b) (6)

Sent from a mobile device, please excuse any typos.

From: (b) (6)
Sent: Wednesday, March 14, 2018 11:49:14 AM
To: (b) (6) (b) (6) (b) (6)
Subject: Fwd: [EXTERNAL] EMR calls

Can u provide the quick thumbs up and little natrative

Sent from my Sprint Samsung Galaxy S7.

----- Original message -----

From: (b) (6)@CERNER.COM>
Date: 3/14/18 12:47 PM (GMT-05:00)
To: "Windom, John H." <(b) (6)@va.gov>, (b) (6)@CERNER.COM>
Subject: RE: [EXTERNAL] EMR calls

Sure its yes but will affirm....

(b) (6)

Sent from my Sprint Samsung Galaxy S7.

----- Original message -----

From: "Windom, John H." <(b) (6)@va.gov>
Date: 3/14/18 12:41 PM (GMT-05:00)
To: (b) (6)@CERNER.COM>
Subject: FW: [EXTERNAL] EMR calls

We are providing an answer but give me yours
Too.
Thx
Jw

Sent with Good

(b) (6)

From: Blackburn, Scott R.

Sent: Wednesday, March 14, 2018 9:37:42 AM
To: Windom, John H.; Short, John (VACO); Zenooz, Ashwini
Subject: FW: [EXTERNAL] EMR calls

-----Original Message-----

From: Bruce Moskowitz [mailto:(b) (6)@mac.com]
Sent: Wednesday, March 14, 2018 12:18 PM
To: Blackburn, Scott R.
Subject: [EXTERNAL] EMR calls

To save time can you tell me if the Cerner contract has a provision to have the EMR that is in Intensive care units interact with a central monitoring system? Currently all major institutions have a command and control center staff that monitors intensive care units located in different hospitals in their system. The future is expanding this to monitor emergency rooms, recovery rooms and telemetry beds. If it is not in place which should be a standard part of the contract we will have billions in further costs to the system.

Sent from my iPad
Bruce Moskowitz M.D.

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From: Windom, John H.
Sent: 14 Mar 2018 17:50:18 +0000
To: Truex, Matthew; Blackburn, Scott R.
Cc: Foster, Michele (SES)
Subject: RE: any other NDAs come in?

Tracking.
Thx
Jw

Sent with Good (www.good.com)

From: Truex, Matthew
Sent: Wednesday, March 14, 2018 10:24:21 AM
To: Windom, John H.; Blackburn, Scott R.
Cc: Foster, Michele (SES)
Subject: RE: any other NDAs come in?

John – To some extent, yes, however, in instances where VA is having specific individuals provide reviews/feedback I still prefer to have NDAs as we are pulling them behind the veil to some extent. I briefly consulted with OGC and their recommendation is to continue to request the NDAs.

Thanks,
Matt

Matthew Truex
Contracting Officer
Department of Veterans Affairs
Office of Procurement, Acquisition and Logistics
Technology Acquisition Center
23 Christopher Way
Eatontown, New Jersey 07724
Office: (b) (6)
Mobile: (b) (6)
e-mail: (b) (6)@va.gov



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From: Windom, John H.
Sent: Wednesday, March 14, 2018 12:48 PM
To: Truex, Matthew; Blackburn, Scott R.
Cc: Foster, Michele (SES)
Subject: RE: any other NDAs come in?

NDAs are a moot point after the public posting, correct?
Jw

Sent with Good (www.good.com)

From: Truex, Matthew
Sent: Wednesday, March 14, 2018 9:45:41 AM
To: Blackburn, Scott R.
Cc: Windom, John H.; Foster, Michele (SES)
Subject: RE: any other NDAs come in?

Mr. Blackburn,

I have received NDAs for all individuals except (b) (6) and (b) (6)

NDAs are in hand for (b) (6) Dr. Moskowitz, Mr. Sherman, Mr. Perlmutter, and (b) (6) Those with signed NDAs have all been sent a link to the RFP files.

Thanks,
Matt

Matthew Truex
Contracting Officer
Department of Veterans Affairs
Office of Procurement, Acquisition and Logistics
Technology Acquisition Center
23 Christopher Way
Eatontown, New Jersey 07724
Office: (b) (6)
Mobile: (b) (6)
e-mail: (b) (6)@va.gov



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From: Truex, Matthew
Sent: Tuesday, March 13, 2018 2:17 PM
To: Blackburn, Scott R.; Windom, John H.; Foster, Michele (SES)
Subject: RE: any other NDAs come in?

Mr. Blackburn – As you may have seen, NDAs were just received from Mr. Perlmutter and Mr. Sherman. I am in the process of providing (b) (6) Mr. Perlmutter and Mr. Sherman access to the RFP files via the Army's SAFE site.

Thanks,
Matt

Matthew Truex
Contracting Officer
Department of Veterans Affairs
Office of Procurement, Acquisition and Logistics
Technology Acquisition Center
23 Christopher Way
Eatontown, New Jersey 07724
Office: (b) (6)
Mobile: (b) (6)
e-mail: (b) (6)@va.gov



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From: Truex, Matthew
Sent: Tuesday, March 13, 2018 12:32 PM
To: Blackburn, Scott R.; Windom, John H.; Foster, Michele (SES)
Subject: RE: any other NDAs come in?

Absolutely, will do Mr. Blackburn. The only NDA I have received is from (b) (6) as stated yesterday.

Matthew Truex
Contracting Officer
Department of Veterans Affairs
Office of Procurement, Acquisition and Logistics
Technology Acquisition Center
23 Christopher Way
Eatontown, New Jersey 07724
Office: (b) (6)
Mobile: (b) (6)
e-mail: (b) (6)@va.gov



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From: Blackburn, Scott R.
Sent: Tuesday, March 13, 2018 11:41 AM
To: Truex, Matthew; Windom, John H.; Foster, Michele (SES)
Subject: any other NDAs come in?

Let me know if/when they do. The Secretary is monitoring very closely so I want to give him a little "here is where we are" by the end of the day.

Once again – thanks for your patience and support with this. I want to make sure we do this all in the right way so leaning on you guys for help. I do think this is important for external validation, buy-in, and maybe even a few slight course corrections before signing if they do find anything that we need to improve (extra sets of eyes and different perspectives is always good – especially on a contract of this significance and magnitude).

Scott Blackburn
Acting CIO & Executive-in-Charge, Office of Information & Technology
Department of Veterans Affairs

From: Blackburn, Scott R.
Sent: 14 Mar 2018 09:56:12 -0700
To: (b) (6)
Cc: Windom, John H.; Truex, Matthew; Foster, Michele (SES); (b) (6)
Subject: RE: VA EHR

Thanks so much, (b) (6)

From: (b) (6) [mailto:(b) (6)@imail.org]
Sent: Wednesday, March 14, 2018 11:52 AM
To: Blackburn, Scott R.
Cc: Windom, John H.; Truex, Matthew; Foster, Michele (SES); (b) (6)
Subject: [EXTERNAL] RE: VA EHR

Scott,

I have attached my signed NDA. I look forward to visiting tomorrow. Thanks (b) (6)

From: Blackburn, Scott R. [mailto:(b) (6)@va.gov]
Sent: Monday, March 12, 2018 7:08 PM
To: (b) (6)@imail.org
Cc: Windom, John H. <(b) (6)@va.gov>; Truex, Matthew <(b) (6)@va.gov>; Foster, Michele (SES) <(b) (6)@va.gov>; (b) (6)@va.gov
Subject: RE: VA EHR

(b) (6)

Thank you for agreeing to be an extra set of outside eyes as we at VA finalize our EHR contract. We appreciate your vast experience and expertise; and want to make sure we get to the best place possible for Veterans, the country and taxpayers. As we are incredibly grateful to you for volunteering your time, we want to make this as easy as possible for you. Here are 3 next steps.

- 1) We will need you to sign the attached NDA. Please return to Matt Truex (cc'd).
- 2) Matt will then send you the latest package under separate cover.
- 3) Given government contracts are different than what you are used to reading, we would propose a quick phone call so that we can orient you to the contract and help focus you on the parts where your expertise will be most valuable. Matt Truex will lead this from our side and has told me is available between tomorrow from 9:30-11am ET or I am sure he can also find other times if these don't work for you. I will ask (b) (6) (cc'd) here to help set up a time.

Thanks again!
Scott

From: (b) (6) [mailto:(b) (6)@imail.org]
Sent: Monday, March 12, 2018 4:34 PM
To: Blackburn, Scott R.
Subject: [EXTERNAL] Re: VA EHR

Yes, I would be glad to help. What is the next step? (b) [REDACTED]

Sent from (b) (6) [REDACTED] Phone

On Mar 12, 2018, at 6:54 AM, Blackburn, Scott R. <(b) (6) [REDACTED]@va.gov> wrote:

(b) [REDACTED]
(6) [REDACTED]

I hope this finds you well. On behalf of Secretary Shulkin I wanted to see if we could enlist your help. We are very close to finalizing our EHR deal with Cerner; however we want to make sure we get a few extra set of eyes on it to make sure we are doing right by Veterans, the country and taxpayers. Would you have the time/ability to conduct a quick high level review and provide input in the next week or so? You were referred to us by Dr. Bruce Moskowitz.

Thanks so much,
Scott

Scott Blackburn

Acting CIO & Executive-in-Charge, Office of Information & Technology
Department of Veterans Affairs

From: (b) (6)
Sent: 14 Mar 2018 15:52:19 +0000
To: Blackburn, Scott R.
Cc: Windom, John H.; Truex, Matthew; Foster, Michele (SES); (b) (6)
Subject: [EXTERNAL] RE: VA EHR
Attachments: NDA EHRM Stan Huff signed 180314.pdf

Scott,

I have attached my signed NDA. I look forward to visiting tomorrow. Thanks, (b) (6)

From: Blackburn, Scott R. [mailto:(b) (6)@va.gov]
Sent: Monday, March 12, 2018 7:08 PM
To: (b) (6)@imail.org>
Cc: Windom, John H. <(b) (6)@va.gov>; Truex, Matthew <(b) (6)@va.gov>; Foster, Michele (SES) <(b) (6)@va.gov>; (b) (6)@va.gov>
Subject: RE: VA EHR

(b) (6)

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Thanks again!
Scott

From: (b) (6) [mailto:(b) (6)@imail.org]
Sent: Monday, March 12, 2018 4:34 PM
To: Blackburn, Scott R.
Subject: [EXTERNAL] Re: VA EHR

Yes, I would be glad to help. What is the next step? (b) (6)

Sent from (b) (6) iPhone

On Mar 12, 2018, at 6:54 AM, Blackburn, Scott R. (b) (6)@va.gov wrote:

(b) (6)

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Thanks so much,
Scott

Scott Blackburn

Acting CIO & Executive-in-Charge, Office of Information & Technology
Department of Veterans Affairs

NON-DISCLOSURE AGREEMENT

1. I acknowledge that I have been selected to participate in the planning for an electronic health record acquisition. In the course of participating in this acquisition, I may be or have been given access to or entrusted with Source Selection Information (as defined in Federal Acquisition Regulation (FAR) 2.101 and 3.104), and/or other sensitive Government data marked or considered as "proprietary" (e.g., restrictive legend per FAR 52.215-1) that I cannot release to others nor can I use for the financial benefit of others or myself.

Source Selection Information is defined in FAR 2.101 & 3.104 and other sensitive Government data includes data marked or considered as "proprietary" (e.g., restrictive legend per FAR 52.215-1). Data includes all data, information and software, regardless of the medium (e.g. electronic or paper) and/or format in which the data exists, and includes data which is derived from, based on, incorporates, includes or refers to such Source Selection and/or proprietary data (collectively referred to herein as "the data"). Any data which is derived from, based on, incorporates, includes or refers to data shall be treated as Source Selection, or proprietary data and shall be subject to the terms of this Non-Disclosure Agreement.

2. I understand that 41 U.S.C. § 423, commonly referred to as the Procurement Integrity Act, and now codified at U.S.C.A. § § 2101-2107, and provisions FAR 3.104 govern the release of proprietary and source selection information. I certify that I will not disclose any contractor bid, solicitation, proprietary, or source selection information directly or indirectly to any person other than a person authorized by the head of agency or the contracting officer to receive such information. I understand that unauthorized disclosure of such information may subject me to substantial administrative, civil and criminal penalties, including fines, imprisonment, and loss of employment under the Procurement Integrity Act or other applicable laws and regulations.

3. I certify that I will not discuss evaluation of source selection matters with any unauthorized individuals (including Government personnel), even after contract award, without specific prior approval from proper authority.

4. These provisions are consistent with, and do not supersede, conflict with, or otherwise alter the employee obligations, rights, or liabilities created by existing statute or Executive order relating to (1) classified information, (2) communications to Congress, (3) the reporting to an Inspector General of a violation of any law, rule, or regulation, or mismanagement, a gross waste of funds, an abuse of authority, or a substantial and specific danger to public health or safety, or (4) any other whistleblower protection. The definitions, requirements, obligations, rights, sanctions, and liabilities created by controlling Executive orders and statutory provisions are incorporated into this agreement and are controlling. These statutes and Executive orders include the following:

- Executive Order No. 12958;
- The Privacy Act (5 U.S.C. § 552a);
- The Trade Secrets Act (18 U.S.C. § 1905);
- Section 7211 of title 5, United States Code (governing disclosures to Congress);
- Section 1034 of title 10, United States Code, as amended by the Military Whistleblower Protection Act (governing disclosure to Congress by members of the military);

Section 2302(b)(8) of title 5, United States Code, as amended by the Whistleblower Protection Action (governing disclosures of illegality, waste, fraud, abuse or public health or safety threats);

The Intelligence Identities Protection Act of 1982 (50 U.S.C. § 421 *et seq.*) (governing disclosures that could expose confidential Government agents); and

The statutes which protect against disclosure that may compromise the national security, including sections 641, 793, 794, 798, and 952 of title 18, United States Code, and section 4(b) of the Subversive Activities Act of 1950 (50 U.S.C. § 783(b)).

Additionally, pursuant to 38 Code of Federal Regulations 1.201, all VA employees with knowledge or information about actual or possible violations of criminal law related to VA programs, operations, facilities, contracts, or information technology systems shall immediately report such knowledge or information to their supervisor, any management official, or directly to the Office of (b) (6)

Signature: _____

Name Printed: _____

Title: *Chief Medical Informatics Officer*

Organization: *Intermountain Healthcare*

Organizational Conflict(s) of Interest (OCIs): *None known*

From: (b) (6)
Sent: 14 Mar 2018 06:40:49 -0500
To: Blackburn, Scott R.; Truex, Matthew
Cc: Windom, John H.
Subject: RE: [EXTERNAL] RE: VA EHR

Good morning, I believe we have everyone scheduled for tomorrow here is the breakdown:

8:30AM

(b) (6)

11:30AM

(b) (6)

I have yet to hear back from the three folks you emailed last night.

Thanks,

(b) (6)

From: Blackburn, Scott R.
Sent: Tuesday, March 13, 2018 11:07 PM
To: (b) (6); Truex, Matthew
Cc: Windom, John H.
Subject: FW: [EXTERNAL] RE: VA EHR
Importance: High

Let's try to get everyone else lined up on the timeline I previously laid out. I don't want to ruin his vacation. At the same time I don't want this to drag on.

From: (b) (6) [mailto:(b) (6)@mayo.edu]
Sent: Tuesday, March 13, 2018 11:04 PM
To: Blackburn, Scott R.
Cc: (b) (6); Truex, Matthew
Subject: Re: [EXTERNAL] RE: VA EHR

Tomorrow or next Thursday? I am on the Big Sur coast now on vacation. Cell coverage spotty. (b) (6)

(b) (6)

Sent from my iPhone

On Mar 13, 2018, at 1:46 PM, Blackburn, Scott R. <(b) (6)@va.gov> wrote:

(b) (6) - thank you so much! 2 next steps.

- 1) Matt (cc'd here) will send you the latest package of material to review.

- 2) (b) (6) (also cc'd here) will reach out to you to schedule some time this week so that Matt/team can orient you to what Matt will be sending to you. Government contracts are very different than typical private sector contracts (longer and some would say more bureaucratic). So in order to help we'll jump on the phone so that Matt can walk you through what sections to look at and what you can ignore.

Thanks again!
Scott

From: (b) (6) [redacted]@mayo.edu]
Sent: Tuesday, March 13, 2018 12:43 PM
To: Blackburn, Scott R.
Subject: Re: [EXTERNAL] VA EHR

Thank you for the invitation to provide input. I am glad for accept. Please let me know how I can be of service. I will be traveling largely out of cell coverage the next day (b) (6)

Sent from my iPhone

On Mar 12, 2018, at 6:55 AM, Blackburn, Scott R. <(b) (6)@va.gov> wrote:

(b) (6)

I hope this finds you well. On behalf of Secretary Shulkin I wanted to see if we could enlist your help. We are very close to finalizing our EHR deal with Cerner; however we want to make sure we get a few extra set of eyes on it to make sure we are doing right by Veterans, the country and taxpayers. Would you have the time/ability to conduct a quick high level review and provide input in the next week or so? You were referred to us by Dr. Bruce Moskowitz.

Thanks so much,
Scott

Scott Blackburn
Acting CIO & Executive-in-Charge, Office of Information & Technology
Department of Veterans Affairs

From: Foster, Michele (SES)
Sent: 13 Mar 2018 14:09:34 -0700
To: Windom, John H.
Subject: RE: VHA EHR - 2 calls that my assistant will set up

Thanks John-I'll be on the train headed your way Thursday morning but (b) (6) will be with Matt.
R/Michele

Michele R. Foster
Associate Executive Director
Office of Acquisition Operations
Technology Acquisition Center (TAC)
Department of Veterans Affairs
23 Christopher Way
Eatontown, NJ 07724
Ofc: (b) (6)



From: Windom, John H.
Sent: Tuesday, March 13, 2018 5:07 PM
To: Truex, Matthew
Cc: Foster, Michele (SES)
Subject: FW: VHA EHR - 2 calls that my assistant will set up

Matt,
I will speak for 5 minutes and turn over to you. My comments will likely revolved around the D&F.
Very painful.
Thx
John

John H. Windom, Senior Executive Service (SES)
Program Executive for Electronic Health Record Modernization (PEO EHRM)
Special Advisor to the Under Secretary for Health
811 Vermont Avenue NW (b) (6)
Washington, DC 20420
(b) (6)@va.gov
Office: (b) (6)
Mobile: (b) (6)
Executive Assistant: (b) (6) - Appointments and Scheduling
(b) (6)@va.gov Office: (b) (6)

From: Blackburn, Scott R.
Sent: Tuesday, March 13, 2018 5:04 PM
To: Marc Sherman
Cc: IP: (b) (6) @gmail.com; Bruce Moskowitz; Truex, Matthew; Windom, John H.; DJS; (b) (6)
(b) (6) Fleck, Robert R. (OGC); Foster, Michele (SES)
Subject: VHA EHR - 2 calls that my assistant will set up

Marc/Bruce/Ike – thank you so much for the prompt replies. I just spoke to Bruce. We've got 100% participation (b) (6) and we are moving forward. Matt Truex (cc'd, our contracting officer) is making sure everyone has the right material. (b) (6) (my assistant, cc'd here) will be organizing a few phone calls in 2 steps:

Step 1 – Basic orientation to the government contract structure. This will be a 30-45 minute orientation so that folks know what they are looking at. John Windom and Matt Truex will host this and clue people into the parts to focus on and parts that are standard government things that are less relevant. This can be done in groups (ideally) or in one-offs to fit to accommodate people's busy schedules. (b) (6) has already scheduled 2 times in case these work for you. If they do not, she will work with your schedulers to find other times in the next 24-48 hours (sooner the better).

- Thursday 8:30-9:15am ET – (b) (6) confirmed
- Thursday 11:30am-12:15pm ET – (b) (6) confirmed

Step 2 – Feedback calls. Per Bruce's idea, we'll schedule 2 separate feedback calls for early next week. Both 90 minutes each. We are aiming for Monday, Tuesday or Wednesday at the latest. (b) (6) will set these up.

- CIOs ((b) (6) – and of course each of you are encouraged to join)
- Doctors ((b) (6) – and of course each of you are encouraged to join)

Let me know how this sounds. Thank you again for your support and assistance on this critical matter.

Scott

From: Marc Sherman [mailto:(b) (6) @gmail.com]
Sent: Tuesday, March 13, 2018 1:40 PM
To: Blackburn, Scott R.
Cc: IP; (b) (6) @gmail.com; Bruce Moskowitz; Truex, Matthew; Windom, John H.; DJS
Subject: [EXTERNAL] Re: VA EHR NDA

Scott, Matt and John

Thank you for the NDA draft that you sent along and the organized approach. I have attached the following to close the loop:

1. a marked up version of the NDA with a few necessary adjustments in red-line so you can see the changes that were made,
2. a blank copy of the amended NDA for Bruce and Ike to sign, and

3. a signed version by me of the amended NDA.
Thanks and happy to help as requested.

Marc

On Tue, Mar 13, 2018 at 10:31 AM, Blackburn, Scott R. <(b) (6)@va.gov> wrote:
Ike, Bruce, Marc:

Thank each of you for agreeing to lend an extra set of outside eyes on the EHR contract. We appreciate your support and want to make sure we get to the best place possible for Veterans, the country and taxpayers. As we are incredibly grateful to you for volunteering your time, we want to make this as easy as possible for you. Here are 3 next steps.

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We have also connected with (b) (6) and (b) (6) who all have all received the NDA and we are working with them. I am hoping to connect with (b) (6) today.

Thanks again!
Scott

Scott Blackburn
Acting CIO & Executive-in-Charge, Office of Information & Technology
Department of Veterans Affairs

From: Bruce Moskowitz
Sent: 13 Mar 2018 14:59:21 -0400
To: Blackburn, Scott R.;Truex, Matthew;Windom, John H.
Cc: DJS;IP;(b) (6)@gmail.com
Subject: [EXTERNAL] NDA.pdf
Attachments: NDA.pdf

Sent from my iPad
Bruce Moskowitz M.D.

NON-DISCLOSURE AGREEMENT (Dated March 13, 2018)

1. I acknowledge that I have been selected to participate in the planning for an electronic health record acquisition. In the course of participating in this acquisition, I may be or have been given access to or entrusted with Source Selection Information (as defined in Federal Acquisition Regulation (FAR) 2.101 and 3.104), and/or other sensitive Government data marked as "proprietary" (e.g., restrictive legend per FAR 52.215-1) that I cannot release to others nor can I use for the financial benefit of others or myself.

Source Selection Information is defined in FAR 2.101 & 3.104 and other sensitive Government data includes data marked as "proprietary" (e.g., restrictive legend per FAR 52.215-1). Data includes all data, information and software, regardless of the medium (e.g. electronic or paper) and/or format in which the data exists, and includes data which is derived from, based on, incorporates, includes or refers to such Source Selection and/or proprietary data (collectively referred to herein as "the data"). Any data which is derived from, based on, incorporates, includes or refers to data shall be treated as Source Selection, or proprietary data and shall be subject to the terms of this Non-Disclosure Agreement.

2. I understand that 41 U.S.C. § 423, commonly referred to as the Procurement Integrity Act, and now codified at U.S.C.A. § 2101-2107, and provisions FAR 3.104 govern the release of proprietary and source selection information. As it relates to the information that has been made available to me pursuant to this Non-Disclosure Agreement, I certify that I will not disclose any contractor bid, solicitation, proprietary, or Source Selection Information directly or indirectly to any person other than the President of the United States or a member of his administration to whom the President authorizes, another person subject to an equally restrictive Non-Disclosure Agreement related to the subject matter of this Agreement, the Secretary of the Department of Veterans Affairs or a person authorized by the head of agency or the contracting officer to receive such information. I understand that unauthorized disclosure of such information may subject me to substantial administrative, civil and criminal penalties, including fines, imprisonment, and loss of employment under the Procurement Integrity Act or other applicable laws and regulations.

3. I certify that I will not discuss evaluation of source selection matters with any unauthorized individuals (including Government personnel other than those set out in Paragraph 2 above), even after contract award, without specific prior approval from proper authority.

4. These provisions are consistent with, and do not supersede, conflict with, or otherwise alter the employee obligations, rights, or liabilities created by existing statute or Executive order relating to (1) classified information, (2) communications to Congress, (3) the reporting to an Inspector General of a violation of any law, rule, or regulation, or mismanagement, a gross waste of funds, an abuse of authority, or a substantial and specific danger to public health or safety, or (4) any other whistleblower protection. The definitions, requirements, obligations, rights, sanctions, and liabilities created by controlling Executive orders and statutory provisions are incorporated into this agreement and are controlling. These statutes and Executive orders include the following:

;
;
;
;
;

NON-DISCLOSURE AGREEMENT

Planning for an electronic health record acquisition

Dated Tuesday March 13, 2018

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- Executive Order No. 12958;
- The Privacy Act (5 U.S.C. § 552a);
- The Trade Secrets Act (18 U.S.C. § 1905);
- Section 7211 of title 5, United States Code (governing disclosures to Congress);
- Section 1034 of title 10, United States Code, as amended by the Military Whistleblower Protection Act (governing disclosure to Congress by members of the military);
- Section 2302(b)(8) of title 5, United States Code, as amended by the Whistleblower Protection Action (governing disclosures of illegality, waste, fraud, abuse or public health or safety threats);
- The Intelligence Identities Protection Act of 1982 (50 U.S.C. § 421 *et seq.*) (governing disclosures that could expose confidential Government agents); and
- The statutes which protect against disclosure that may compromise the national security, including sections 641, 793, 794, 798, and 952 of title 18, United States Code, and section 4(b) of the Subversive Activities Act of 1950 (50 U.S.C. § 783(b)).

Additionally, pursuant to 38 Code of Federal Regulations 1.201, all VA employees with knowledge or information about actual or possible violations of criminal law related to VA programs, operations, facilities, contracts, or information technology systems shall immediately report such knowledge or information to their supervisor, any management official, or directly to the Office of Inspector General.

Signature

(b) (6)

BRUCE MOSKOWITZ, M.D.

1411 N. FLAGLER DR.

(b) (6)

WEST PALM BEACH, FL 33401

Name Printed:

(b) (6)

Organizational Conflict(s) of Interest (OCIs):

From: IP
Sent: 13 Mar 2018 18:07:06 +0000
To: Marc Sherman;Blackburn, Scott R.
Cc: (b) (6) @gmail.com;Bruce Moskowitz;Truex, Matthew;Windom, John H.;DJS
Subject: [EXTERNAL] RE: VA EHR NDA
Attachments: Perlmutter.EHR NDA v2 mbs.pdf

Attached is my signed NDA. Thank you.

From: Marc Sherman [mailto:(b) (6) @gmail.com]
Sent: Tuesday, March 13, 2018 1:40 PM
To: Blackburn, Scott R.
Cc: IP; (b) (6) @gmail.com; Bruce Moskowitz; Truex, Matthew; Windom, John H.; DJS
Subject: Re: VA EHR NDA

Scott, Matt and John

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We have also connected with (b) (6) and (b) (6) who all have all received the NDA and we are working with them. I am hoping to connect with (b) (6) today.

Thanks again!
Scott

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Acting CIO & Executive-in-Charge, Office of Information & Technology
Department of Veterans Affairs

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Planning for an electronic health record acquisition

Dated Tuesday March 13, 2018

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Signature

(b) (6)


Name Printed: Isaac Perlmutter

Organizational Conflict(s) of Interest (OCIs):

From: Marc Sherman
Sent: 13 Mar 2018 13:39:36 -0400
To: Blackburn, Scott R.
Cc: IP; (b) (6) @gmail.com; Bruce Moskowitz; Truex, Matthew; Windom, John H.; DJS
Subject: [EXTERNAL] Re: VA EHR NDA
Attachments: EHR NDA v2.pdf, EHR NDA v2 mbs.pdf, EHR NDA v2 RL.pdf

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Department of Veterans Affairs

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Signature:

(b) (6)



Name Printed: Marc Sherman

Organizational Conflict(s) of Interest (OCIs):

From: Foster, Michele (SES)
Sent: 13 Mar 2018 08:08:07 -0700
To: Windom, John H.
Subject: RE: VA EHR NDA

John,

Thanks- I keep reminding myself of your note where you said "more people have read our RFP than have read the Bible" and I just giggle. I think that is becoming more accurate by the day!

R/Michele

Michele R. Foster
Associate Executive Director
Office of Procurement, Acquisition & Logistics
Technology Acquisition Center (TAC)
Department of Veterans Affairs
23 Christopher Way
Eatontown, NJ 07724
Ofc: (b) (6)



From: Windom, John H.
Sent: Tuesday, March 13, 2018 11:01 AM
To: Foster, Michele (SES)
Subject: FW: VA EHR NDA

Welcome to my world.

Jw

Sent with Good (www.good.com)

From: Blackburn, Scott R.
Sent: Tuesday, March 13, 2018 7:31:27 AM
To: IP; (b) (6) @gmail.com; (b) (6) @gmail.com; Bruce Moskowitz
Cc: Truex, Matthew; Windom, John H.; DJS
Subject: VA EHR NDA

Ike, Bruce, Marc:

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Thanks again!
Scott

Scott Blackburn
Acting CIO & Executive-in-Charge, Office of Information & Technology
Department of Veterans Affairs

From: (b) (6)
Sent: 13 Mar 2018 03:28:35 +0000
To: Blackburn, Scott R.
Cc: Windom, John H.; Truex, Matthew; Foster, Michele (SES); (b) (6)
Subject: [EXTERNAL] RE: VA EHR

I am glad to help. Thanks, (b) (6)

From: Blackburn, Scott R. [mailto:(b) (6)@va.gov]
Sent: Monday, March 12, 2018 7:45 PM
To: (b) (6)@imail.org>
Cc: Windom, John H. <(b) (6)@va.gov>; Truex, Matthew (b) (6)@va.gov>; Foster, Michele (SES) <(b) (6)@va.gov>; (b) (6)@va.gov>
Subject: RE: VA EHR

Thanks (b) (6) We will make one of those times work. We will confirm tomorrow. Thanks so much for doing this.

Scott

From: (b) (6) [mailto:(b) (6)@imail.org]
Sent: Monday, March 12, 2018 9:25 PM
To: Blackburn, Scott R.
Cc: Windom, John H.; Truex, Matthew; Foster, Michele (SES); (b) (6)
Subject: [EXTERNAL] RE: VA EHR

Scott,

I am at the AMIA Joint Summit in San Francisco so it will be Wednesday morning before I can return the signed NDA. I am currently available for a call on Wednesday 11:00 am to noon, 2:00-2:30 pm, or 3:30-4:00 pm. If none of those times work I am free on Thursday morning. Let me know. Thanks, (b) (6)

From: Blackburn, Scott R. [mailto:(b) (6)@va.gov]
Sent: Monday, March 12, 2018 7:08 PM
To: (b) (6)@imail.org>
Cc: Windom, John H. <(b) (6)@va.gov>; Truex, Matthew <(b) (6)@va.gov>; Foster, Michele (SES) <(b) (6)@va.gov>; (b) (6)@va.gov>
Subject: RE: VA EHR

(b) (6)

Thank you for agreeing to be an extra set of outside eyes as we at VA finalize our EHR contract. We appreciate your vast experience and expertise; and want to make sure we get to the best place possible for Veterans, the country and taxpayers. As we are incredibly grateful to you for volunteering your time, we want to make this as easy as possible for you. Here are 3 next steps.

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Thanks again!
Scott

From: (b) (6) [mailto:(b) (6) @imail.org]
Sent: Monday, March 12, 2018 4:34 PM
To: Blackburn, Scott R.
Subject: [EXTERNAL] Re: VA EHR

Yes, I would be glad to help. What is the next step? (b) (6)

Sent from (b) (6) Phone

On Mar 12, 2018, at 6:54 AM, Blackburn, Scott R. <(b) (6) @va.gov> wrote:

(b) (6)

I hope this finds you well. On behalf of Secretary Shulkin I wanted to see if we could enlist your help. We are very close to finalizing our EHR deal with Cerner; however we want to make sure we get a few extra set of eyes on it to make sure we are doing right by Veterans, the country and taxpayers. Would you have the time/ability to conduct a quick high level review and provide input in the next week or so? You were referred to us by Dr. Bruce Moskowitz.

Thanks so much,
Scott

Scott Blackburn
Acting CIO & Executive-in-Charge, Office of Information & Technology
Department of Veterans Affairs

From: Blackburn, Scott R.
Sent: 12 Mar 2018 13:23:10 -0700
To: Windom, John H.
Subject: FW: [EXTERNAL] Fwd: Contact review

What do you think of having Ike/Bruce/Marc sign NDA's as well? Seems they are willing to "work around the clock to finish this".

From: David Shulkin [mailto:(b) (6)@gmail.com]
Sent: Monday, March 12, 2018 4:18 PM
To: Blackburn, Scott R.
Subject: [EXTERNAL] Fwd: Contact review

Can we get them the nda as well?

Sent from my iPhone

Begin forwarded message:

From: IP <(b) (6)@frenchangel59.com>
Date: March 12, 2018 at 2:50:52 PM EDT
To: David Shulkin <(b) (6)@gmail.com>
Cc: (b) (6)@gmail.com"; (b) (6)@gmail.com>, (b) (6)@gmail.com"; (b) (6)@gmail.com>, Bruce Moskowitz <(b) (6)@mac.com>
Subject: RE: Contact review

David,

How quick can you send the NDA to the people?

And why not send it to Bruce, Marc and myself so we can work around the clock to finish this?

Thank you.

-----Original Message-----

From: Bruce Moskowitz [mailto:(b) (6)@mac.com]
Sent: Monday, March 12, 2018 2:03 PM
To: David Shulkin <(b) (6)@gmail.com>
Cc: IP <(b) (6)@frenchangel59.com>; (b) (6)@gmail.com; (b) (6)@gmail.com
Subject: Re: Contact review

The following may be discussed on the review however if not, we need to be sure there is a platform for the planned device registry. Separately there needs to be the ability to insert a mental health

tracker, nutritional tracker and wellness tracker. We do not want to find out there is add on charges for these essential elements of the EMR.

It also needs to be worked out how mental health records, treatments and appointments do not fall through the cracks during this lengthy implementation. The head of Columbia Psychiatry will Dr. Lieberman can assist with this aspect.
Thank you.

Sent from my iPad
Bruce Moskowitz M.D.

On Mar 12, 2018, at 1:53 PM, David Shulkin
<(b) (6)@gmail.com> wrote:

Bruce- we got 4 of 6 on board so far plus one additional

(b) (6)

(b) (6)

(b) (6)

(b) (6)

Also got (b) (6) from Pittsburgh

We are still waiting to hear from (b) (6) (b) (6) and (b) (6) and will add them if they agree

All will sign an NDA and will receive a package today and we will either bring in or video connect within the next 48 hours- we cannot have a group meeting because of federal rules so we must connect or meet separately

Thanks so much

From: Zenooz, Ashwini
Sent: 12 Mar 2018 12:54:51 +0000
To: A Zenooz
Subject: FW: [EXTERNAL] Fwd: Call with Secretary Shulkin - Mosko et al

From: Windom, John H.
Sent: Monday, March 12, 2018 8:50 AM
To: Zenooz, Ashwini
Subject: FW: [EXTERNAL] Fwd: Call with Secretary Shulkin

John H. Windom, Senior Executive Service (SES)
Program Executive for Electronic Health Record Modernization (PEO EHRM)
Special Advisor to the Under Secretary for Health
811 Vermont Avenue NW (b) (6) floor Suite 5080)
Washington, DC 20420
(b) (6) @va.gov
Office: (b) (6)
Mobile: (b) (6)
Executive Assistant: (b) (6) Appointments and Scheduling
(b) (6) @va.gov Office: (b) (6)

From: Windom, John H.
Sent: Sunday, March 11, 2018 11:20 PM
To: Blackburn, Scott R.
Subject: RE: [EXTERNAL] Fwd: Call with Secretary Shulkin

Thank you for sharing.
Jw

Sent with Good (www.good.com)

From: Blackburn, Scott R.
Sent: Sunday, March 11, 2018 7:10:57 PM
To: Windom, John H.
Subject: FW: [EXTERNAL] Fwd: Call with Secretary Shulkin

FYI. I will learn more tomorrow morning.

From: David Shulkin [mailto:(b) (6) @gmail.com]
Sent: Sunday, March 11, 2018 5:55 PM

To: Blackburn, Scott R.
Subject: [EXTERNAL] Fwd: Call with Secretary Shulkin

Can you join me at morning report in the am- 8 or 815 am to discuss next steps on this

Note the emails below

Sent from my iPhone

Begin forwarded message:

From: Bruce Moskowitz <(b) (6)@mac.com>
Date: March 11, 2018 at 12:57:53 PM EDT
To: (b) (6)@jhu.edu <(b) (6)@imail.org,&br/>(b) (6)@sutterhealth.org, (b) (6)@facs.org" <(b) (6)@facs.org>,
(b) (6)@mayo.edu, "(b) (6)@
(b) (6)@mgh.harvard.edu>
Cc: David Shulkin <(b) (6)@gmail.com>, IP <(b) (6)@frenchangel59.com>,
(b) (6)@gmail.com, (b) (6)@gmail.com, (b) (6)@reagan.com
Subject: Call with Secretary Shulkin

The Secretary will send out an email to set up a conference call to discuss the review of the EMR contract for the VA. This has tremendous importance not just for the VA, but setting a standard for interoperability for the nation and also EMR innovation. I want to take the opportunity to thank everyone for their service to the Veterans and advancing health care for the nation

Sent from my iPhone

From: Windom, John H.
Sent: 16 Jan 2018 19:38:00 +0000
To: (b) (6)
Subject: FW: delivery of draft report
Attachments: VA EHRM Interoperability Panel Jan 2018 - Summary Report DRAFT 2018-01-15 Submitted.pdf

Fyi. Will be looking for your critique.
Thx
John

John H. Windom, Senior Executive Service (SES)
Program Executive for Electronic Health Record Modernization (PEO EHRM)
Special Advisor to the Under Secretary for Health
811 Vermont Avenue NW (b) (6)
Washington, DC 20420

(b) (6) @va.gov

Office: (b) (6)

Mobile: (b) (6)

Executive Assistant: (b) (6) – Appointments and Scheduling

(b) (6) @va.gov Office: (b) (6)

From: (b) (6) @mitre.org]
Sent: Monday, January 15, 2018 11:01 PM
To: Blackburn, Scott R.; Windom, John H.
Subject: [EXTERNAL] delivery of draft report

Dear Scott and John,

Please find attached a **draft** document entitled VA EHRM RFP Interoperability Review Report, which I am submitting to you on behalf of MITRE, as requested, on 15 January 2018.

This draft document contains a summary of the recommendations of the expert Panel we convened on 5 January, and constitutes one of the tasks in this effort. Additional tasks will be completed and added to the final Report as agreed upon in the schedule in the revised PWS.

As always, your comments, questions, suggestions, and feedback are most welcome.

Thank you.
Sincerely,

(b) (6)

(b) (6)

Vice President, Chief Technology Officer (CTO)

The MITRE Corporation
202 Burlington Road | Bedford, MA | 01730-1420
Office: (b) (6)
Mobile: (b) (6)
Email: (b) (6)@mitre.org

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MITRE – On behalf of VA Electronic Health Record Modernization



Authors: Jay J. Schnitzer, M.D., Ph.D.

(b) (6)

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Document Number: MTR####

Author(s): Jay J. Schnitzer, M.D., Ph.D.

(b) (6)

(b) (6)

McLean, VA
January 2018

Sponsor: Department of Veterans
Affairs

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VA EHRM RFP Interoperability Review Report

January 15, 2018

MITRE

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DRAFT

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Executive Summary

In support of the Secretary of Veterans Affairs (VA), David J. Shulkin, M.D., the MITRE Corporation convened and hosted a VA Electronic Health Record Modernization (EHRM) Request for Proposal (RFP) Interoperability Review Panel on January 5, 2017, at MITRE's McLean headquarters. The invited external senior electronic health record interoperability subject matter experts (the Panel) reviewed the interoperability language in the existing request for proposals (RFP) and developed joint suggestions and recommendations for VA to consider for incorporation to support the successful execution of a new commercial electronic health record (EHR). The Panel affirmed that the major goal should be seamless Veteran-centric Healthcare that is achieved through true EHR interoperability. This goal rests on three overarching principles, which should be supported by interoperability language in the RFP: 1) free and open access to data, 2) an ecosystem that provides fair access for 3rd parties by a level playing field, and 3) and seamless Veteran and health provider (clinician) experience. This goal and these principles will be enabled by four categories of recommendations from the Panel (the first three to the interoperability language in the RFP, and the fourth for future VA contracts): 1) commit to full VA-DoD interoperability, 2) leverage current and future standards, 3) commit to open, standards-based application programming interfaces (APIs), and 4) use Care in the Community contracts to foster interoperability.

For the first category (commit to full VA-DoD interoperability), the most important specific recommendations included the following:

- VA should consider adding clear language that specifically defines the degree of interoperability the solution will provide, ranging from basic file sharing to fully interchangeable, integrated and functionally identical patient records; and
- The contract language should include the following elements:
 - performance measures to ensure Cerner-to-Cerner operability,
 - ability for bulk data export based on standards, with no proprietary formats (e.g., Flat FHIR), and
 - “push” capability to insert back into the VA EHR / Cerner database.

For the second category (leverage current and future standards), the following specific recommendations were among the most important:

- Require that Cerner implement all standards as defined by VA, current and future,
- Engage Cerner as an advocate of the VA and DoD position in all relevant standards-making bodies, and
- VA and Veterans must have complete access to data.

For the third category (commit to open, standards-based APIs), the Panel voiced the following recommendations:

- Establish clear publishing and access service requirements,

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- Provide a VA application platform that supports APIs from third party providers with no barrier to entry, and
- Require implementation of clinical decision support (CDS) hooks to invoke decision support from within a clinician's EHR workflow.

Multiple additional specific recommendations are contained within the body of the report.

DRAFT

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Background

The Department of Veterans Affairs (VA) plans to establish seamless care for Veterans throughout the health care provider market. Seamless care requires interoperability between the Department of Defense, VA, VA affiliates, community partners, Electronic Healthcare Records (EHR) providers, healthcare providers, and vendors. The MITRE Corporation (MITRE) is tasked to independently review Cerner's proposed EHR solution capability to seamlessly transmit health records with EHR systems used by entities which provide health care to Veterans and qualified beneficiaries of Veterans contributing patient data to a Veteran's health record to include the Veterans Choice Program (VCP) community-care service providers and VA affiliates. This review is comprised of four parts:

1. Conduct an external Interoperability Review Panel to review the interoperability language in the existing request for proposals (RFP),
2. Engage an independent and unbiased legal expert to identify the specific changes to the RFP language necessary to implement the recommendations from the Interoperability Review Panel,
3. Visit the University of Pittsburgh Medical Center to understand the existing operational multi-vendor solution and interoperability solutions for applicability and scalability to the VA, and
4. Estimate the cost for developing point-to-point interoperability solutions between Cerner and Epic, using existing commercial healthcare provider experience.

I. Interoperability Review Panel

Introduction

In support of the Secretary of Veterans Affairs, David J. Shulkin, M.D., the MITRE Corporation convened and hosted a Department of Veterans Affairs (VA) Electronic Health Record Modernization (EHRM) Request for Proposal (RFP) Interoperability Review Panel on January 5, 2017, at MITRE's McLean headquarters. MITRE invited external senior electronic health record interoperability subject matter experts (hereafter referred to as Panelists) to review the interoperability language in the existing request for proposals (RFP) and to develop joint suggestions and recommendations for VA to consider for incorporation to support the successful execution of a new commercial electronic health record (EHR). Eleven Panelists were present, in person along with several senior government executives observing the process (see Appendix A for the full list of participants).

Goal of the Interoperability Review Panel

The Interoperability Review Panel's goal was to provide Secretary Shulkin and his senior leadership team with key best practice insights and learnings from national experts regarding EHR interoperability and the corresponding language in the draft RFP based on their successful business transformations and implementations of a new commercial EHR system across a

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distributed hospital and provider network. The outcome of the Panel is this document—a summary of the expert recommendations—which will inform VA’s interoperability contract language. The document also provides actionable and specific best practice recommendations and rationales to enable a successful acquisition and implementation.

Methodology/Approach

The session was held in two parts. The first part was conducted as a fish-bowl exercise and was guided by Chatham House Rule. The Panelists sat at a center table, with VA and other government participants sitting at surrounding tables in listening mode. The second part consisted of a summary debrief to the Secretary and senior VA leadership. The Secretary had complete liberty to ask questions and engage with the Panel throughout the second session. MITRE moderated the session to elicit inputs from all Panelists and to drive alignment towards consensus in the recommendations.

The agenda for the first five-hour session was structured to elicit inputs from all Panelists, with notes captured as redlines to the RFP interoperability language on-screen to ensure accuracy in the Panelists’ recommendations. Subsequently, in a facilitated discussion, the Panelists grouped their recommendations into specific categories in real time.

The agenda for the second two-hour session was a debrief to the Secretary and senior VA leadership on the Panels’ recommendations, and provided opportunities for the Secretary to discuss the recommendations in additional detail. This document summarizes the discussion that took place. It highlights actionable changes to the RFP language and additional recommendations and lessons learned that can enable interoperability of the VA EHRM solution. Text boxes highlighted throughout the report feature direct quotes from a number of Panelists. To ensure participant confidentiality, the transcription and event recording used to develop this report have been destroyed by MITRE.

Topic Area: VA Definition of Interoperability

“The key to modernization is creating greater interoperability with Governmental partners, including DoD, in a way that focuses efforts in support of the Veteran’s journey, beginning with their military service. We will partner with others to ensure Veterans can get their benefits, care, and services consistently, easily, and with excellent customer service, no matter where they are throughout their lives. VA will work with local communities, and with other Federal, State, Tribal, and Local Government entities to ensure Veterans get what they need. VA will also continue to leverage the private sector where appropriate and needed to deliver the very best outcomes for Veterans.” - draft VA 2018-2024 Strategic Plan

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Enable data sharing, interoperability, and agility through data standardization.

VA needs to allow data sharing among various business needs, such as business intelligence, and transportability of information between sites. Panelists advised VA to leverage and support the best-in-class innovation currently in practice within the VA culture. It is also important to enable interoperability as VA integrates the EHR to other supporting systems, both within the VA network and with external health service providers. Agility is necessary for adoption of future innovative technologies and/or if VA wants to upgrade or change the EHR approach. The Panelists cautioned that this EHR technology is already 20-years old and, as with all industries and IT solutions, there are many possible disruptive technologies on the horizon.

“It really optimizes transportability of best practices, because if you are trying to transfer best practices from one site to another and you have the same system where the best practice is going to land, then it is much easier.”



Figure 1. VA Definition of EHR Interoperability

The session began with a discussion on the definition of interoperability as currently defined by VA (Figure 1). Prior to establishing a roadmap to inform a nationwide plan to advance health data interoperability, VA must first ensure system-wide interoperability across the Department. This is described as, and was referred to during the Review Panel session as, “Level 1 Interoperability,” and includes migration of Veteran data from ~130 instances of VistA to one VA platform.

“Level 2 Interoperability,” as discussed in the Panel discussion addresses the ability to leverage the same DoD Cerner platform to ensure seamless care from active service to Veteran status. After this implementation, the clinical data transformation will allow for the true longitudinal

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view of a Veteran’s record as he or she transition from DoD to VA for care and other critical services such as benefit adjudication.

“Level 3 Interoperability” is the next level on the national scale for both VA and DoD to take an important step towards transforming electronic patient data exchange on a scale not yet fully realized. With the utilization of community healthcare providers via the VA Community of Care initiative and DoD’s Tricare network providers, VA has the opportunity to drive interoperability among DoD and VA as well as the extensive network of healthcare providers that serve our Nation’s Veterans, active duty service members, and their beneficiaries.

True nationwide interoperability for the entire United States is the ultimate end goal, which the Panel agreed could be realized if the three levels aforementioned levels of interoperability are achieved. Here, VA has the opportunity to drive clinical transformation and a complete electronic health record for all patients at the national level.

Topic Area: Commit to Full VA-DOD Interoperability

The review Panel was primarily focused on reviewing the interoperability language within the RFP for the Cerner contract. However as described in Interoperability Levels 1 and 2, the commitment to the seamless integration of VA and DoD health data is the required foundation that is required to realize interoperability with private sector healthcare providers¹. It is important to note that the interoperability levels can be addressed simultaneously and should not be separated as their integration is required to efficiently achieve the larger future data sharing ecosystem.

“You really have to get the basics done first. Let’s just make absolutely sure that the interoperability between DoD and VA [is achieved].”

Specify the expectations for interoperability between DoD and VA.

During the discussion about the expectation that Cerner will provide a single EHR solution to be shared by both DoD and VA, the Panel raised concerns about the lack of specificity in the contract language. Current interoperability data standards address a subset of the Veteran’s clinical record and VA has the opportunity to ensure Cerner provides interoperability of all discrete data, at a minimum, between the VA and DoD. Adopting the same platform allows for the increase of seamless sharing, but the Panel believes that the VA should take additional action to ensure that is realized. The DoD and VA systems should have full interoperability, using proprietary database to database interoperability if necessary, to maximize the power of interoperability between those two systems. These systems should be configured to meet the distinct need of each while being connected to each other in a native database-to-database method as necessary, leveraging open interoperability standards wherever possible. As a result, a clinician should experience no differences when he or she moves from a VA system to a DoD system. These data should also be computable, or be made computable according to a specific schedule. The VA should consider adding specific language that specifically defines the degree

¹ Healthcare providers is used to refer to community based physicians/specialist and hospitals.

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of interoperability the solution will provide, ranging from basic file sharing to fully interchangeable, integrated and functionally identical patient records.

The Panelists also had the opinion that, for the VA and DoD collectively, the contractual language include the following requirements:

- performance measures to ensure Cerner-to-Cerner operability
- ability for bulk data export based on standards, with no proprietary formats (e.g., Flat FHIR)
- “push” capability to insert back into the VA EHR / Cerner database

Pivot the RFP to be Veteran-centric and not system-centric.

The Panelists discussed the impact of EHR implementations on clinician workflow, identifying the issue as one of approaching the implementation as an IT system implementation rather than the preferred Veteran- or clinician-centric implementation. The current RFP appears to be written in a system-centric way instead of leveraging use-cases to describe the Veteran or clinician experience or workflow to characterize the requirement. The Panelists recommend VA incorporate use-cases to characterize requirements and amend the language to emphasize the Veteran-centric objectives. In addition, Panelists recommend VA be mindful that EHRs do not currently maximize efficient clinical workflow, requiring VA specify that the solution present the clinician with relevant information where needed with a minimum number of “clicks to find.”

Topic Area: Leverage Current and Future Standards

The integrated EHR platform that DoD and VA are implementing provides the opportunity to significantly influence interoperability standards across the healthcare community, addressing gaps and competition among current standards. The Panel recognized that there is limited business value to commercial health systems and technologies in making data portable between them, which lowers the barrier to patient movement between healthcare providers.

Engage Cerner as an advocate of the VA and DoD position in all relevant standards-making bodies.

The Panel recommended increased VA presence and leadership in the national health IT standards-making activities, in coordination with the DoD. Additionally, Cerner should be an active advocate of the VA-DoD position and actively participate in the development and/or evaluation of new Standards, Policy Directives, Operating Procedures, Processes, etc. As an integrated voting bloc, VA, DoD, and Cerner will have the potential to be a strong driver of national standards. It is understood that VA is not currently active in the Fast Healthcare Interoperability Resources (FHIR) community nor with the Health Level Seven International (HL7) Argonaut Project. In addition, there is a need for standards to exchange patient reported outcome data for integration into the clinician’s workflow. The current language seemingly puts

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the burden on Cerner for the development of standards, and the Panel recommends that VA take a more active position. This will ensure that when standards mature, VA will participate and drive implementation. Where standards are immature, VA must participate to accelerate standardization.

Require Cerner implement all standards as defined by VA, current and future.

It is unclear where health IT is heading in five years, therefore the Panel strongly suggests VA include contract language to address possible future advancements in the form of standards as defined by the VA. At a minimum, VA should seek maximum interoperability with community care organizations using open interoperability standards wherever possible. This flexibility ensures external stakeholders are not relied upon to determine VA standards acceptance. The Panel recommended specific categories of standards for the VA to pay particular attention to: real time data read/write by care providers and Veterans; interoperability tools; seamless DoD and VA vision records; and principles for data normalization and structure. The Panel also recognizes Cerner's influence in ensuring the CommonWell network interoperates at the highest possible levels with other networks including CareQuality, an influence that VA should encourage.

VA must own its data; clear ownership and access is critical to success now and in the future.

The Panel highlighted an important recommendation regarding data rights that was discussed in the prior VA EHRM Listening Forum on September 7, 2017. The Panel recommended VA define who has what rights from a data owning, access, and sharing perspective (e.g., VA owns the data and all data products vs. community care providers owning the patient data vs. Veteran owns all of his or her own data). Determining the authoritative data source for the various elements of a Veteran's health record is an important Veteran-centric component to interoperability, the longitudinal record, and seamless access to data.

"So, what you need is clear access and clear ownership of your information...you need to have absolutely, undisputed, clear ownership and ability to move the data to any place you want to use it and use it in any way you want to use it when you get there. And not have them [Cerner] be able to say no, that's our data or hinder you in any way or have an unreasonable charge to get it."

VA should define an enterprise-wide policy for all VA data. A suitable policy would include but not be limited to EHRM-specific data, and this policy should be issued by VACO or VHA. VA must have clear ownership of and access to all the information in the EHR and be able to move it now and in the future (into new systems or among systems) as needed. Owning the data ensures that it is available regardless of vendor or system. It is essential to include this in the Cerner contract. Technology innovations occur at rapid speed in the 21st century, and VA must have the full ability to move its data to future systems.

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Panelists also recommended VA publish its data model, such as to the National Library of Medicine, to further promote commercial interoperability investments. Lastly, Panelists encouraged that VA leverage its investment in the Open Source Electronic Health Record Alliance (OSEHRA) by providing seed money to develop open source connectors between Cerner and EPIC, which would encourage other vendors to join in the effort.

Topic Area: Commit to Open, Standards-Based APIs

A significant technology enabler of seamless interoperability among the community of Veteran care providers is the use of an Application Programming Interface (API). These software intermediaries allow disparate EHR applications to talk to each other and exchange data back and forth using standard, defined forms. The Panel emphasized the need for VA to create an environment that would minimize additional costs to the community providers in order to interoperate with VA. This can be accomplished by requiring the new EHR system to expose APIs that support bi-directional data transactions. The Panel further recommended that VA make a commitment to open, standards-based APIs, including the SMART on FHIR/Argonaut APIs, to facilitate the ready and efficient exchange of data with the care in the community partners and to support open clinical workflow.

Establish clear publishing and access service requirements.

The Panel recognized that data access requirements differ based on who is providing or accessing that data. As such, the Panel recommended VA be more specific in defining each level of data publishing and access service that is specific for (1) Veteran access (e.g., use of vets.gov); (2) VA clinician access; (3) Partner access; and (4) HIE access. These requirements should include a clear description of identity and access management requirements including user population types and the association of specific application permissions tied to roles/positions.

Machine-to-machine access is also critical for efficient sharing of information. The Panel recommends VA ensure that all significant data stored in the software is accessible through APIs with no requirement for creation of custom applications to specifically access VA data. From a future-looking perspective, VA should require the EHR system support the ability to access data elements using open standard-based interfaces, and include the ability to interface legacy data, patient-generated data, and third-party data that reside outside of the EHR system. In addition, Cerner should provide the required utility services to support intermediary or peer-to-peer services (e.g., support Veteran-directed or Veteran-mediated requests, exchange, and ingestion from non-VA providers).

“The Contractor should provide all of the data that is currently being provided in the Contractor's patient portal to the consumer via an open standards based API gateway. The Contractor should also provide all of the reporting data required by federal law to the veteran via an open standards based API framework, accessible via any application or third-party data store of the veteran's choice, that's number one.”

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Provide a VA application platform that supports APIs from third party providers with no barrier to entry.

Currently vets.gov exists as a portal to Veteran services. The Panel recommended VA consider using such a portal to connect any third-party app to the EHR solution without fees or vendor permissions. The VA should be in full authority to connect any third-party app against one of the standard open API's that is conformant with the vendor's API without pre-registering the app with the vendor. This is a very important authority to have in terms of being able to innovate rapidly and not be constrained. The Panelists also reviewed the "API Gateway" language, provided during the API discussion to anchor the dialogue. The Panelists concurred that this requirement is fundamental to supporting interoperability. The Panelists recommend VA include a requirement that VA has full authority to connect any third-party app with the Cerner system, without Cerner approval. Furthermore, VA should ensure that third-party app developers connecting to the VA system via the open standard, and that VA-defined APIs continue to own their IP. From a usability perspective, the Panel also recommend VA be able to establish the connectivity business rules, such as the ability for apps to remain connected for a reasonable time frame (e.g., 1 year) and to receive automatic notification on patient information updates.

"The API Gateway document is awesome..world class and future looking."

Require implementation of Clinical Decision Service (CDS) hooks to invoke decision support from within a clinician's EHR workflow.

EHRs are essential for efficient delivery of high-quality care, as they provide the clinician with essential decision data at the time required. However, current EHR systems approach workflow from an IT system perspective, vs. a clinician's. The latter workflow should, of course, be paramount in the VA EHR implementation, but also leverage a recent innovation called CDS Hooks. This technology provides the clinician with context-driven decision support and capability, by enabling the EHR to trigger third party services at key events, including medication ordering and opening a patient face sheet. For example, when the VA clinician begins to prescribe medication, a CDS Hook can call an external service that presents the clinician with the list of medications already prescribed to the patient by clinicians outside of the VA. The Panelists strongly recommend VA require Cerner to implement and use CDS Hooks within the clinician workflow.

Topic Area: Use Community Care Contracts to Foster Interoperability

The Panel recommended that prior to execution of the Community Care Act contract, third-party providers, (and Cerner competitors), should be required to commit to support the contract as early adopters.

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The new EHR system must be able to communicate with other EHRs (e.g., Epic, AllScripts, etc.) within the care community. It is critical that VA ensure the Cerner EHR system is robust for future interoperability with new products. Cerner must commit to support other forms of interoperability, such as a presentation layer that is common to other systems (e.g., the App store model).

Veterans must be able to access and download a computable form of their health data.

Panelists advised that the biggest problem today is access to data. VA must be clear that Cerner must expose data so it can be used by third-parties. In the contract and in conversations with Cerner and third parties, VA must require specifics on how Veterans and providers will access and share their data. In addition, VA must require that any agreements leave the door open for future standards and technologies.

Panelists conceived that this could be achieved by invoking the principle that the data belongs to the Veteran, rather than citing specific technologies and standards (as they are evolving so rapidly). The Veteran must be able to invoke his or her right of access to data as the intermediary to support data exchange across all providers (e.g., pull through their API on phone and push to their community care provider), now and in the future. Keeping pace with this requirement will drive continual innovation with Cerner and all providers.

VA must own the API layer.

Cerner ownership of the API layer (across every customer) poses real threat to achieving interoperability, speed of innovation, and cost efficiency throughout the network of community care providers. Panelists stated that it is of utmost importance that VA include specific language stipulating that VA and Veterans will be able to use third-party apps without having to register them with Cerner. VA must control the API key, not Cerner.

Additionally, VA should require that Cerner provide access to MPages, a developer toolkit, and a programming interface that will enable innovators and third-party application programming interface (API) development.

Require community care contracts include VA EHR standards to support bi-directional data sharing.

Panelists agreed that by requiring the support and collaboration of community care providers and participating actively in health IT standards bodies, VA has the opportunity to advance the “national” standard for data sharing – closing any gap and inconsistencies between federal and industry, and inter-industry standards. Every provider in the chain of a Veteran’s care must be required to support the same standards for data interoperability to result in the seamless, best

“Innovations going forward are going to come from multiple directions. And having those interfaces, and going with a general interoperability approach that doesn't fork off from what's happening in the rest of the healthcare system, will allow the Veterans to benefit from technology whether that's coming from Google, from a new company, from an innovative shop within the VA -- you end up creating a market with good prices, high value.”

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possible care for Veterans. This includes the requirement that all providers and third-party applications, in exchange for using the VA-provided API gateway, provide bi-directional health information back to the VA.

Change the data exchange consent model from “opt-in” to “opt out.”

To encourage seamless interoperability across all entities providing a Veteran with care, the consent model for exchanging data between healthcare providers must be modified to provide an opt-out rather than opt-in, which limits participant numbers. This allows the Veteran to invoke their individual right of access under HIPAA to move their data as needed. Many states have already adopted an opt-out consent policy as part of their health information exchange². This can be achieved by writing new language into the Choice Care Act.

Topic Area: Additional Contract Changes

In addition to the recommendations in the prior sections, the Panelists encourage VA to add additional definitions and clarity in the following areas:

- Require Cerner to provide VA with full read and partial write access to all data elements within the EHR, at VA's sole discretion.
- Require Cerner to make the VA data model, standards, and other similar interoperability changes available in all other non-VA Cerner instances of its EHR platform.
- Clearly define “enabling security framework.” Does this mean a specific security frameworks such as NIST, HITRUST, etc.?
- Amend “national Common Trust Framework” to specifically refer to the intended reference. Suggest replacing with “Trusted Exchange Framework and Common Agreement (TEFCA)” specified in the 21st Century Cures Act.
- Amend PWS 5.10.4(i) to clarify if the “provider collaboration via secure e-mail using Direct standards” is limited to the Direct protocols and just the Cerner platform.
- Incorporate the model RFP language necessary for Cerner to support the API and SMART on FHIR platform and SMART-enabled applications, provided in Appendix B. This language is expected to evolve and therefore the contract should incorporate not only the current language, but its reference at <https://smarthealthit.org/2017/08/draft-model-rfp-language-for-purchasing-extensible-health-it/>.

MITRE Action Items

- MITRE will collect the Panel’s specific ideas for contract language that VA could use in the Cerner acquisition contract.

² See https://www.healthit.gov/sites/default/files/State%20HIE%20Opt-In%20vs%20Opt-Out%20Policy%20Research_09-30-16_Final.pdf

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- MITRE will engage an external legal expert to review the full RFP and recommend redlined changes to implement the Panel's recommendations.

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II. Recommendations for RFP Changes

TO BE COMPLETED

III. Observations from University of Pennsylvania Medical Center Site Visit

TO BE COMPLETED

IV. Estimated Cost to Implement Cerner to Epic Interoperability

TO BE COMPLETED

DRAFT

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Appendix A: Interoperability Review Forum Participants

| Panelists | Title | Organization |
|------------------------------|--|--|
| Aneesh Chopra | President | CareJourney, former United States Chief Technology Officer |
| Charles E. (Chuck) Christian | Vice President, Technology and Engagement | Indiana Health Information Exchange |
| Ryan Howells | Principal | Leavitt Partners, LLC |
| Andrew Karson, MD | Director, Clinical Decision Support | Massachusetts General Hospital |
| Chris Klomp | Chief Executive Officer | Collective Medical Technologies, Inc. |
| Kenneth Mandl, MD | Professor, Biomedical Informatics Director, Computational Health Informatics | Harvard Medical School Boston Children's Hospital |
| Frank Opelka, MD | Medical Director, Quality and Health Policy | American College of Surgeons |
| Peter Pronovost, MD, PhD | Director, Armstrong Institute for Patient Safety and Quality Senior Vice President, Patient Safety and Quality | Johns Hopkins University |
| Christopher J. (Cris) Ross | Chief Information Officer | The Mayo Clinic |
| Carla Smith | Executive Vice President | The Healthcare Information and Management Systems Society |
| Paul R. Sutton, MD, PhD | Professor, Biomedical Informatics and Medical Education Associate Medical Director, Inpatient IT Systems, UW Medicine IT Services | University of Washington |

| VA Participants | Title | Organization |
|------------------------|---|--------------------------------|
| David J. Shulkin, M.D. | Secretary | Department of Veterans Affairs |
| Carolyn Clancy | Executive in Charge, Veterans Health Administration | Department of Veterans Affairs |
| Bill James | Acting Assistant Secretary, Office of Information & Technology | Department of Veterans Affairs |
| John Windom | Program Executive for EHRM and Special Advisor to the Under Secretary for Health | Department of Veterans Affairs |
| Dr. Ashwini Zenooz | Chief Medical Officer, EHRM; Deputy, Office of Deputy Under Secretary for Health Policy & Services, VHA | Department of Veterans Affairs |
| John Short | Chief Technology Officer, EHRM; Executive Director of Information Technology System Modernization | Department of Veterans Affairs |
| (b) (6) | Contracts | Department of Veterans Affairs |
| (b) (6) | Portfolio Lead: Project Transition and VA Integration, VA Center for Innovation | Department of Veterans Affairs |
| (b) (6) | Senior Advisor to the Secretary on Strategic Partnerships | Department of Veterans Affairs |
| Kyle Sheetz | White House Fellow | Department of Veterans Affairs |

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| Other Federal Government Participants | Title | Organization |
|---------------------------------------|--|--|
| (b) (6) | Senior Advisor, Office of Administration | The Centers for Medicare & Medicaid Services |
| Shannon Sartan | Director, Digital Services | The Centers for Medicare & Medicaid Services |
| Jon White | Deputy National Coordinator for Mental Health | The United States Department of Health and Human Services/The Office of the National Coordinator for Health Information Technology |
| Bruce Moskowitz, M.D. | Internist | The White House |
| Camilo Sandoval | Senior Advisor | The White House |
| Chris Liddell | Assistant to the President for Strategic Initiatives | The White House, Office of American Innovation |
| Dr. Lauren Thompson | Director | DoD/VA Interagency Program Office |

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Appendix B: RFP Language for Purchasing Extensible Health IT

From <https://smarthealthit.org/2017/08/draft-model-rfp-language-for-purchasing-extensible-health-it/>, as of January 15, 2018.

SMART Platform (www.smarthealthit.org) is a project that lays the groundwork for a more flexible approach to sourcing health information technology tools. Like Apple and Android's app stores, SMART creates the means for developers to create and for health systems and providers to easily deploy third-party applications in tandem with their existing electronic health record, data warehouse, or health information exchange platforms.

To deploy SMART-enabled applications, health systems must ensure that their existing health information technology infrastructure supports the SMART on FHIR API. The SMART on FHIR starter set detailed below lists the minimum requirements for supporting the API and SMART-enabled applications. You may wish to augment this list of minimum requirements with suggestions from the Add-On Functionality listed depending on the types of applications your organization wishes to deploy.

This document is intended as a resource for providers and health systems as they draft Request for Proposals (RFPs) and negotiate with their HIT vendors for added functionality. It has multiple authors from across the SMART team and its advisors. Feedback is welcome.

The vendor must support the SMART on FHIR platform, a vendor agnostic API that allows third-party developers to build external apps and services that integrate with the vended product.

At a minimum, the vendor product should include the following components in order to support SMART on FHIR and SMART-enabled applications:

Data Access

- Provide automated, standards-based, read-only access through the FHIR API and FHIR data models (resources) to:
 - a well-defined set of real-time discrete data (including support for the API parameters and resources described in the Argonaut Implementation Guide)
 - free-text clinical notes

Data Manipulation

- Write structured data from third-party apps back to the organization's EHR and, where relevant, a data warehouse, using the FHIR REST API to communicate data including:
 - free-text clinical notes

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Standards-Based App Authorization

- Protect data and identity endpoints with standards-based authorization mechanisms (including the OAuth2 profiles described in the Argonaut Implementation Guide).
- Provide access to data endpoints with an approach that does not require user intervention subsequent to the initial setup such as the method described in the draft SMART Backend Services Profile (<http://docs.smarthealthit.org/authorization/backend-services/>) Provide capability to restrict this access to a specified set of patients (roster).
- Enable Health System to connect any third-party app of their choice that is conformant with the API without pre-registering the app with HIT Vendor.
- Enable patients to connect any third-party app of their choice that is conformant with the API without pre-registering the app with HIT Vendor through the OAuth Dynamic Registration protocol.
- Provide OAuth refresh tokens with a duration of one year to patient and provider facing apps that support the SMART Client Secret profile.

Identity Management

- Act as a standards-based Identity Provider using OpenID Connect. This ensures that users can authenticate to plug-in apps using single-sign-in via their existing EHR or patient portal credentials.
- Act as a standards-based relying party to a customer-selected Identity Provider using OpenID Connect. This ensures that users can sign into the EHR or patient portal using an external, hospital-supplied single-sign-on account.

Workflow

- Support standards-based embedding of external application UI (HTML5). This ensures that app developers can build Web apps, and these apps can run directly inside of the EHR.
- Support the launch of external applications in the clinician's workflow (this is not limited to the EHR, and should include non-EHR integrated tools such as smart phones and tablets). For example, a clinician that has opted to use a third-party-developed native iPad app to visualize a patient's BMI over time can seamlessly use the application alongside the EHR via single-sign-on.
- Support notifications to and from running applications. For example, an embedded app can notify the EHR when the user is "done" with it.

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Add-On Functionality

The provider organization may also want to consider the following additions to its RFP depending on the types of applications it wishes to develop and run in the future.

Bulk Data Export

- Provide automated access to bulk export of data (complete representation of all data in the MU Common Clinical data set as well as free text notes) using a method like the SMART Flat FHIR draft proposal (<http://docs.smarthealthit.org/flat-fhir>)

Data Manipulation

- Write structured data from third-party apps back to the organization's EHR and, where relevant, a data warehouse, using the FHIR REST API to communicate data including:
 - medication prescriptions
 - lab and diagnostic imaging orders
- Support the dependent transactions necessary to ensure that actions completed by third-party applications using the API are valid in the EHR and data warehouse.

Context-Specific Service Hooks

- Support the ability to call an external standards-based service in specific workflow steps, through the CDS Hooks specification, including:
 - opening a patient record
 - new prescriptions
 - new lab orders
 - new imaging studies

Intellectual Property

The IP of any app integrated through the SMART on FHIR API belongs to the author and not the vendor.

Custom SMART on FHIR Extension to a Proprietary API

Should a vendor neglect to provide SMART on FHIR natively, the client has the right to provide a custom extension to the vendor's API. The ownership of the IP for the custom extension is negotiable between the client and the vendor, but the ownership of the app using the custom extension belongs to its author.

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Appendix C: RFP Interoperability Language Changes

TO BE COMPLETED

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DRAFT

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From: Blackburn, Scott R.
Sent: 29 Dec 2017 11:46:22 -0800
To: Windom, John H.; (b) (6); Zenooz, Ashwini; Short, John (VACO); (b) (6)
(b) (6)
Cc: (b) (6)
Subject: RE: [EXTERNAL] RE: January interoperability panel forums
Attachments: [EXTERNAL] Touching base - VA and interoperability

Let's discuss at 3pm.

On a positive, this is a fantastic list of panelists. I really like that we have (b) (6) and (b) (6) (I wasn't expecting those...both are pleasant surprises). Thanks so much for your work putting this together. In addition to what John mentions, a few other things I would like to discuss at 3pm. To call it out – I am most worried about bringing along our key stakeholders (Secretary, White House, HHS, key influencers).

1) Given this all-star panel and given the overall objectives of this effort, how do we take advantage of this? A few thoughts:

- I agree with John about having team reps in the room (e.g., Windom, Ash, Short). Not sure I understand the logic for excluding them. I would imagine they should be in "listening mode"
- I would also argue for having other government stakeholders in the room. Specifically Camilo Sandoval, (b) (6), Kyle Sheetz, (b) (6) from ONC, and perhaps 1-2 others from HHS/CMS (possibly (b) (6) or one of the people he mentions in the note above. (b) (6) is essentially Seema Verma's special assistant).
- Perhaps we have a "report out" at the end of the day which would include the Secretary, Dr. Clancy and Tom Bowman. Would love to discuss the pros/cons.

2) What is the broader plan for January to get us to the "Jan 31 deadline"? I think it would be hugely beneficial if we can put together a very short document for the Secretary to sign off on:

- Page 1 – The end product of this effort. By January 31, we will deliver XXX. Is it revised language? Is it a report? What does MITRE do versus what VA/government needs to do. Important that we are all on the same page. I believe this is the crux of the issues that John highlights below.
- Page 2 – Experts that we are seeking input from and stakeholders that we are going to include. This list of 8 is fantastic. However there will be others that will need/want opportunities to chip in. I don't want to miss anyone. We can discuss more at 3pm.
- Page 3 – The process between now and Jan 31. Are there other panels? Other activities that we believe are needed? Again, I want full transparency and the Secretary to sign off. Just locking these 8 amazing folks in a room for a day with MITRE, which then produces a report on Jan 31...I don't think that is going to fully get us there. Our worst nightmare will be on Feb 1 to be delaying for another 30 days.

3) (b) (6)

From: Windom, John H.
Sent: Friday, December 29, 2017 2:23 PM
To: (b) (6); Blackburn, Scott R.; Zenooz, Ashwini; Short, John (VACO); (b) (6); (b) (6)
(b) (6)

Cc: (b) (6)
Subject: RE: [EXTERNAL] RE: January interoperability panel forums

(b) (6)

Thanks for sharing. There are many elements I do not agree with and will be prepared to discuss at the 3pm. An immediate nonstarter is a 31 January date of closure. 10 working days from the event is more than sufficient time. In addition, the characterization of Mitre and industry writing our RFP Interoperability requirement is grossly improper.

Thx
John

Sent with Good (www.good.com)

From: (b) (6)
Sent: Friday, December 29, 2017 10:55:55 AM
To: Blackburn, Scott R.; Windom, John H.; Zenooz, Ashwini; Short, John (VACO); (b) (6)
(b) (6)
Cc: (b) (6)
Subject: [EXTERNAL] RE: January interoperability panel forums

Hi Scott,

Please see attached draft agenda.

We are tracking well towards convening an all-day in-person panel at MITRE McLean on Friday, January 5.

We can discuss further on our 3 pm call today.

Thanks,
Best,

(b) (6)

-----Original Message-----

From: Blackburn, Scott R. [mailto:(b) (6)@va.gov]
Sent: Friday, December 29, 2017 9:44 AM
To: (b) (6)@mitre.org>; Windom, John H. <(b) (6)@va.gov>; Zenooz, Ashwini <(b) (6)@va.gov>; Short, John (VACO) <(b) (6)@va.gov>
Subject: January interoperability panel forums

Team - I know Jay was originally planning to get experts together on Jan 4 or 5. What do we have planned? Who will be there?

3 things:

1) I have not heard back anything from our WH 5 CIOs contact. I would like to send him a note over the weekend saying "the train is leaving the station" and giving one more opportunity to have them insert folks if they want to. This is politically sensitive and more of a stakeholder management thing than anything so will have to run this by the Secretary (I also have no idea what conversations could be happening in Mar-a-lago over the holidays). I just

want to avoid having another hang up a few weeks from now.

2) I also want to make sure we involve some internal folks. Camilo Sandoval, (b) (6) Kyle Sheetz the WH fellow are 3 that come to mind.

3) whatever we do, I want to give the Secretary a heads up. More communications and transparency the better.
Thanks and Happy New Year!
Scott

Sent with Good (www.good.com)

From: (b) (6)
Sent: 22 Dec 2017 20:31:16 +0000
To: Blackburn, Scott R.
Cc: (b) (6); (b) (6)
Subject: [EXTERNAL] Touching base - VA and interoperability

Hi Scott, hope all is well. Seema mentioned to me the VA's efforts to move towards interoperability as part of the implementation of the Cerner system.

We'd love to find time for a call early in the new year on this, to ensure that we're incorporating learnings from the VA's experience in our initiative. I've cc'd (b) (6), CMS's Chief Medical Officer, and (b) (6) from the US Digital Service who are helping lead CMS's efforts on interoperability. Please let us know when may be convenient - and hope you have a Happy Holiday!

--
(b) (6)
Senior Advisor | Office of the Administrator
Centers for Medicare & Medicaid Services
(b) (6) (b) (6) @cms.hhs.gov

From: (b) (6)
Sent: 29 Dec 2017 22:11:46 +0000
To: Windom, John H.
Subject: RE: [EXTERNAL] RE: January interoperability panel forums

Thank you, John. It is an honor to work with you.
Happy new year!
Best,

(b) (6)

(b) (6)

MITRE

From: Windom, John H. (b) (6) <(b) (6)@va.gov>
Date: Friday, Dec 29, 2017, 5:08 PM
To: (b) (6) <(b) (6)@mitre.org>
Subject: RE: [EXTERNAL] RE: January interoperability panel forums

Keep pressing (b) (6) I am glad you are on our team. Happy New Year!
Thx
Jw

Sent with Good (www.good.com)

From: (b) (6)
Sent: Friday, December 29, 2017 12:29:35 PM
To: Windom, John H.
Subject: RE: [EXTERNAL] RE: January interoperability panel forums

Understood; no worries.
Thanks,
Best,

(b) (6)

-----Original Message-----

From: Windom, John H. [mailto:(b) (6)@va.gov]
Sent: Friday, December 29, 2017 3:02 PM
To: (b) (6) <(b) (6)@mitre.org>; Blackburn, Scott R. (b) (6) <(b) (6)@va.gov>;
Zenooz, Ashwini <(b) (6)@va.gov>; Short, John (VACO) (b) (6) <(b) (6)@va.gov>;
(b) (6) <(b) (6)@mitre.org>; (b) (6) <(b) (6)@mitre.org>
Cc: (b) (6) <(b) (6)@mitre.org>; (b) (6) <(b) (6)@mitre.org>
Subject: RE: [EXTERNAL] RE: January interoperability panel forums

(b) (6)

What I worry about is that all of our correspondence is discoverable so I must respond in writing to ensure that the courts understand that the Government responded in kind to any potential

violations of procurement law/procedures. Hence my written response to your draft document.
Thx
John

Sent with Good (www.good.com<<http://www.good.com>>)

From: (b) (6)
Sent: Friday, December 29, 2017 11:50:37 AM
To: Blackburn, Scott R.; Windom, John H.; Zenooz, Ashwini; Short, John (VACO); (b) (6)
(b) (6)
Cc: (b) (6)
Subject: RE: [EXTERNAL] RE: January interoperability panel forums

Hi Scott and John,

The document I sent you was a DRAFT, and I am very open to any and all suggestions, edits, and modifications.

I understand the concerns, and want this to be successful for VA and the Veterans.

I look forward to the conversation at 3 pm today.

Thanks,
Best,

(b) (6)

From: Blackburn, Scott R. [[mailto:\(b\) \(6\)@mitre.org](mailto:(b) (6)@mitre.org)]
Sent: Friday, December 29, 2017 2:46 PM
To: Windom, John H. <(b) (6)@va.gov>; (b) (6)@mitre.org;
Zenooz, Ashwini <(b) (6)@va.gov>; Short, John (VACO) <(b) (6)@va.gov>;
(b) (6)@mitre.org; (b) (6)@mitre.org
Cc: (b) (6)@mitre.org; (b) (6)@mitre.org
Subject: RE: [EXTERNAL] RE: January interoperability panel forums

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- * Page 2 - Experts that we are seeking input from and stakeholders that we are going to include. This list of 8 is fantastic. However there will be others that will need/want opportunities to chip in. I don't want to miss anyone. We can discuss more at 3pm.

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3) (b) (6)

From: Windom, John H.

Sent: Friday, December 29, 2017 2:23 PM

To: (b) (6), Blackburn, Scott R.; Zenooz, Ashwini; Short, John (VACO); (b) (6)

(b) (6)

C (b) (6)

Subject: RE: [EXTERNAL] RE: January interoperability panel forums

(b) (6)

Thanks for sharing. There are many elements I do not agree with and will be prepared to discuss at the 3pm. An immediate nonstarter is a 31 January date of closure. 10 working days from the event is more than sufficient time. In addition, the characterization of Mitre and industry writing our RFP Interoperability requirement is grossly improper.

Thx

John

Sent with Good

From: Short, John (VACO)
Sent: 29 Dec 2017 19:57:34 +0000
To: (b) (6)
Subject: RE: [EXTERNAL] RE: January interoperability panel forums

Never mind. I found it.

Warmest regards!
Respectfully,

John A. Short (SES), Doctoral Candidate, MBA-ISM, MSIS, CNSS 4011/4012, FEMA
PDS

Acting Deputy Director, DOD/VA Interagency Program Office (IPO)
Executive Director, Information Technology Systems Modernization
CTO, EHRM PEO

VA Office: (b) (6)

DOD/VA IPO Office: (b) (6)

Cell: (b) (6)

(b) (6)@va.gov

(b) (6)@mail.mil

From: Short, John (VACO)
Sent: Friday, December 29, 2017 2:56:37 PM
To: (b) (6)
Subject: RE: [EXTERNAL] RE: January interoperability panel forums

Where is the invite?

Warmest regards!
Respectfully,

John A. Short (SES), Doctoral Candidate, MBA-ISM, MSIS, CNSS 4011/4012, FEMA
PDS

Acting Deputy Director, DOD/VA Interagency Program Office (IPO)
Executive Director, Information Technology Systems Modernization
CTO, EHRM PEO

VA Office: (b) (6)

DOD/VA IPO Office: (b) (6)

Cell: (b) (6)

(b) (6)@va.gov

(b) (6)@mail.mil

From: (b) (6)
Sent: Friday, December 29, 2017 12:16:24 PM
To: Windom, John H.; Blackburn, Scott R.; (b) (6); Zenooz, Ashwini; Short, John (VACO) (b) (6)
Subject: [EXTERNAL] RE: January interoperability panel forums

All

Joint Meeting is planned today at 3PM to update on the questions below:

Here is brief summary prior to call:

- We have green light on the 5th of January with 8 panelists confirmed to be at MITRE all day at our McLean office. We can review specific names on the call as these are experts who have actual experience working with Cerner and have also negotiated contracts with them.
- There is a strong feeling that government should not be in the room as this should be an idea and input forum, not a decision forum. Important difference. Happy to discuss further on call
- Please reach out to the three names you have identified that the train has left the station so they are happy to join on the 5th.
- This date was set with panel so we can have a quality product to you within defined timeframe.

Talk to everyone at 3pm.

Sent with BlackBerry Work
(www.blackberry.com)

From: Windom, John H. <(b) (6)@va.gov>
Date: Friday, Dec 29, 2017, 10:39 AM
To: Blackburn, Scott R. <(b) (6)@va.gov>; (b) (6)@mitre.org>; Zenooz, Ashwini <(b) (6)@va.gov>; Short, John (VACO) <(b) (6)@va.gov>; (b) (6)@mitre.org>
Subject: RE: January interoperability panel forums

Sir

Including (b) (6) on this note. She is Tracking down answers to these questions and more. I also just heard that Secretary Shulkin is planning to attend this 5 January session with industry. Do you think this is a good idea? I do not.

Vr

Jw

Sent with Good (www.good.com)

From: Blackburn, Scott R.

Sent: Friday, December 29, 2017 6:43:42 AM

To: (b) (6) @mitre.org; Windom, John H.; Zenooz, Ashwini; Short, John (VACO)

Subject: January interoperability panel forums

Team - I know (b) (6) was originally planning to get experts together on Jan 4 or 5. What do we have planned? Who will be there?

3 things:

1) I have not heard back anything from our WH 5 CIOs contact. I would like to send him a note over the weekend saying “the train is leaving the station” and giving one more opportunity to have them insert folks if they want to. This is politically sensitive and more of a stakeholder management thing than anything so will have to run this by the Secretary (I also have no idea what conversations could be happening in Mar-a-lago over the holidays). I just want to avoid having another hang up a few weeks from now.

2) I also want to make sure we involve some internal folks. Camilo Sandoval (b) (6) Kyle Sheetz the WH fellow are 3 that come to mind.

3) whatever we do, I want to give the Secretary a heads up. More communications and transparency the better.

Thanks and Happy New Year!
Scott

Sent with Good (www.good.com)

From: Blackburn, Scott R.
Sent: 15 Dec 2017 13:22:49 -0800
To: Short, John (VACO);Mulligan, Ricci;Chandler, Richard C.
Subject: RE: [EXTERNAL] Fwd: FW: Please review and respond by 1pm tomorrow - External Meeting with Dr. Moskowitz - VA

Got it. I will see what Dr. Clancy wants to do. Seems like we would be happy to talk to this person if we thought there was a fit (but you guys tell me).

From: Short, John (VACO)
Sent: Thursday, December 14, 2017 7:21 AM
To: Mulligan, Ricci; Blackburn, Scott R.; Chandler, Richard C.
Subject: RE: [EXTERNAL] Fwd: FW: Please review and respond by 1pm tomorrow - External Meeting with Dr. Moskowitz - VA

That's the way I read it also.

Also, some of the people mentioned below, like (b) (6) are currently under an IPA to VHA.

Warmest regards!
Respectfully,

John A. Short (SES), Doctoral Candidate, MBA-ISM, MSIS, CNSS 4011/4012, FEMA PDS
Acting Deputy Director, DOD/VA Interagency Program Office (IPO)
Executive Director, Information Technology Systems Modernization
CTO, EHRM PEO
VA Office: (b) (6)
DOD/VA IPO Office: (b) (6)
Cell: (b) (6)
(b) (6)@va.gov
(b) (6)@mail.mil

From: Mulligan, Ricci
Sent: Thursday, December 14, 2017 6:52:13 AM
To: Blackburn, Scott R.; Short, John (VACO); Chandler, Richard C.
Subject: RE: [EXTERNAL] Fwd: FW: Please review and respond by 1pm tomorrow - External Meeting with Dr. Moskowitz - VA

Sounds like this is a VHA issue to get her in? Ricci

Ricci L. Mulligan
Acting Principal Deputy Assistant Secretary
VA OI&T
(b) (6) (O)
(b) (6) Cell

From: Blackburn, Scott R.
Sent: Thursday, December 14, 2017 12:16 AM
To: Mulligan, Ricci; Short, John (VACO); Chandler, Richard C.
Subject: FW: [EXTERNAL] Fwd: FW: Please review and respond by 1pm tomorrow - External Meeting with Dr. Moskowitz - VA

From: Clancy, Carolyn
Sent: Wednesday, December 13, 2017 4:41 PM
To: Blackburn, Scott R.
Subject: FW: [EXTERNAL] Fwd: FW: Please review and respond by 1pm tomorrow - External Meeting with Dr. Moskowitz - VA

Executive in Charge
Veterans Health Administration
810 Vermont Ave, NW
Washington, DC 20420
(b) (6)

From: (b) (6)
Sent: Wednesday, December 13, 2017 4:04:20 PM
To: (b) (6)
Cc: Clancy, Carolyn
Subject: Re: [EXTERNAL] Fwd: FW: Please review and respond by 1pm tomorrow - External Meeting with Dr. Moskowitz - VA

(b) (6)

I am very optimistic based on your e-mail and am around if you want to talk by phone or need anything further. My VA contacts for the IPA are as follows: (b) (6) (b) (6) who was the immediate contact, (b) (6) @utah.edu, who works for (b) (6) who I have also met with and was very interested. I also met with (b) (6) (b) (6) who was the initial contact from VA. They had me also talk with (b) (6) (b) (6) Director, Veterans Health Information Exchange (VLER Health) and others, such as (b) (6) (b) (6)

Let me know if you need more information from me.

On Wed, Dec 13, 2017 at 3:45 PM, (b) (6) @va.gov wrote:

Fax: (b) (6)

(b) (6) @gwu.edu

"Kind words do not cost much. Yet they accomplish much," Blaise Pascal.

From: Zenooz, Ashwini
Sent: 4 Dec 2017 03:50:40 +0000
To: (b) (6)
Subject: RE: [EXTERNAL] FW: follow-up

Thank you. helpful

Sent with Good (www.good.com)

From: (b) (6)
Sent: Sunday, December 03, 2017 7:22:30 PM
To: Zenooz, Ashwini
Subject: RE: [EXTERNAL] FW: follow-up

By stipulating the Choice provider has a CEHRT then it sets a baseline by which we know they have an EHR that can exchange data (good pdf that takes through the requirements <https://www.healthit.gov/sites/default/files/understanding-certified-health-it-2.pdf>) . A couple provisions therein help.

1. Care Coordination Categories (Page 19-27)
2. Page 41: Integrity of Data
3. Page 42: Trusted Connection
4. Patient Engagement (Page 46-48)
5. Electronic Exchange (Page 68-69)

It basically sets a minimum standard we know and the Choice provider is enabled to connect by a number of means, at a low point of entry (their EHR has the capability to exchange data by numerous means and we can get the information back to the VA). At a minimum they can use the Direct Protocol to send documents to the VA.

It also makes sense for the VA to be in line with the broader edicts set by ONC.

Without these kinds of minimum standards the cost may skyrocket if we are responsible to connect every provider that has any EHR or no EHR. Thanks

(b) (6)

From: Zenooz, Ashwini [mailto:(b) (6)@va.gov]
Sent: Sunday, December 3, 2017 20:30
To: (b) (6)@Cerner.com>
Subject: FW: [EXTERNAL] FW: follow-up

(b) (6) can you help me with this response? Are you saying that of the CHOICE providers are requires to use CEHRT, then they can connect into an HIE? Or that we would evaluate the possibility of a direct connection? Not sure what is outside of price point that we have defined that you are referring to...thanks

Cerner Contract has to have the responsibility of 100% connectivity to all EMR platforms for Choice to work

(b) (6) Should be stipulation that Choice provider have MU CEHRT to allow for communication. I am pretty sure this is way outside the price point we have defined. We would need to have the office of interoperability and team on the ground to help make the connections. There is still no, to my knowledge, requirement for Choice providers to provide anything back to the VA.

From: Windom, John H.
Sent: Friday, December 01, 2017 8:36:23 AM
To: Zenooz, Ashwini
Subject: FW: [EXTERNAL] FW: follow-up

Ash
Here is Cerner's response to those questions. Please respond to Blackburn's request utilizing these responses as appropriate. Thx.
Jw

Sent with Good (www.good.com)

From: (b) (6)
Sent: Friday, December 01, 2017 8:10:07 AM
To: Windom, John H.
Cc: (b) (6)
Subject: [EXTERNAL] FW: follow-up

(b) (6) response to Moskowitz questions

Also attaching document with some additional details

(b) (6)

From: (b) (6)
Sent: Monday, November 27, 2017 12:22 PM
To: (b) (6)@CERNER.COM>; (b) (6)@cerner.com>
Cc: (b) (6)@Cerner.com>
Subject: RE: follow-up

See below.

This guy is way out of his depth in understanding EMR and how things get done.

Much of the same stuff we put in the Prep document 2 weeks ago (attached).

The first 2 are so overly broad we would never have enough money to meet the demand.

(b) (6)

From: (b) (6)
Sent: Monday, November 27, 2017 12:05
To: (b) (6) @cerner.com>; (b) (6) @Cerner.com>; (b) (6) @CERNER.COM>
Cc: (b) (6) @Cerner.com>; (b) (6) @CERNER.COM>
Subject: FW: follow-up

Close Hold.....can you please just do a quick couple sentence answer for below?

This is the Dr from W Palm that is connected to Trump and he reached out with some follow-up items. I believe he is outdated in his understanding of system but we need to be responsive here.

(b) (6)

From: Windom, John H. [mailto:(b) (6) @va.gov]
Sent: Monday, November 27, 2017 11:38 AM
To: (b) (6) @CERNER.COM>
Subject: follow-up

Begin forwarded message:

Subject: Re: [EXTERNAL] Follow up meeting

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Cerner has to have telemedicine built into the system

(b) (6) Millennium has numerous built in functions that facilitate Telemedicine. The term is too broad to say we will do it all. Video visits, yes, Asynchronous consultations yes, e visits yes, Image based consults, yes. ICU Telemedicine no, Digital path slide review, no. Remote Rad reading yes.

Cerner needs to track duplicate diagnostic testing

(b) (6) Millennium has intrinsic capability to limit duplicate testing. If the provider is connected to VA Lab electronically we can track.

Cerner needs to have medication error, tracking of controlled substances and duplicate prescription monitoring

(b) (6) intrinsic millennium capabilities. NarxCheck helps with PDMPs.

Cerner needs to track appointment times between the VA and the Choice Program.

(b) (6) referral functionality allows for us to understand time to completion of referral.

Cerner needs to have voice recognition built in

(b) (6) it does in PC Touch, Addition of Dragon Medical One will make this a yes.

These are the basics we need to know prior to writing an agenda and meeting.

Thank you

John H. Windom, Senior Executive Service (SES)
Program Executive for Electronic Health Record Modernization (PEO EHRM)
Special Advisor to the Under Secretary for Health
811 Vermont Avenue NW (b) (6)
Washington, DC 20420
(b) (6)@va.gov
Office: (b) (6)
Mobile: (b) (6)
Executive Assistant: (b) (6) – Appointments and Scheduling
(b) (6)@va.gov Office: (b) (6)

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this message and notify the sender of the delivery error by e-mail or you may call Cerner's corporate offices in Kansas City, Missouri, U.S.A at (b) (6)

From: Zenooz, Ashwini
Sent: 1 Dec 2017 11:05:38 -0600
To: Windom, John H.
Subject: RE: [EXTERNAL] FW: follow-up

Ok

Sent with Good (www.good.com)

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Sent: Friday, December 01, 2017 8:36:23 AM
To: Zenooz, Ashwini
Subject: FW: [EXTERNAL] FW: follow-up

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Sent: Friday, December 01, 2017 8:10:07 AM
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Subject: [EXTERNAL] FW: follow-up

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811 Vermont Avenue NW (b) (6)

Washington, DC 20420

(b) (6) @va.gov

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Tracking duplicate prescriptions and medication errors:

1. Access to the clinical record directly or through interoperability tools (CommonWell or other services) would allow for current med lists to be shared between the VA and Community Providers decreasing duplicate ordering. Native Med checking occurs in millennium as it would in Community EMRs.
2. E Prescribing downloads in the community or within the VA allow for additional methods to discover and find the most current scripts.
3. Reporting tools can be used to monitor duplication and rules designed to prevent med errors.

Tracking tests that were ordered, completed and results go to all physicians involved in the Veterans care:

1. Millennium is built with standard ability to set up routing or resulted orders to affiliated providers (e.g. primary care, specialists, etc) so the care team is better informed. We believe we have more functionality in this area than VISTA currently provides the VA. Orders that are brought into the VA environment from outside can be routed to Message Centers of relevant providers with established relationships.
2. Community providers are required to upload any relevant documents to the Managed Care contractors or VA portal. VISTA stores them as scanned documents. If this process is followed scanned documents can be routed for review by relevant clinical teams.

Patient notification of critically abnormal results with follow-up resolution:

Functionality is available within Millennium for CAP Compliance and have a specific workflow for critical lab results to providers how are responsible for contacting patients. Any outside lab performing labs are responsible for notifying ordering clinician of the result. Stored documents from the community providers will still require a manual review as is done in VISTA today.

Arranging appointment follow-up between the VA and Private sector:

Current Millennium Referral process facilitates coordination and tracking of FU appointments to the community.

Emergency room visits in the private sector ability to access records immediately and VA physicians notified of emergency care and follow-up:

Their current functionality allows them to view the visit information in the existing HIEs or the community providers sending it via direct messaging. Same as what Cerner will do.

Cerner has no registry to track what Cardiac and orthopedic devices are implanted in case there is a recall of the device:

Community providers are responsible for recalls. Cerner has native functionality to capture all relevant implant data. Implant logs and reports are used to manage the life cycle of implants should there be a recall.

Automatic record transfer from the Choice Provider to the VA patient record with flagging new information to every VA health care worker:

Cerner interoperability tools facilitate the transfer of documents via HIE or Direct message. Community EMR should allow for push to HIE or send to referring provider via Direct. Outside Records are prominently displayed within the Cerner EMR for all providers to see and can be included as permanent part of record by clinician or automatically incorporated.

A radiology platform to see films in high definition to compare X-rays and ability for radiologists to efficiently find previous films. For instance, a radiologist needs to know if a lung nodule is new or was there previously and the same size:

1. Community Radiologists could be provided Cerner EMR viewing capability to review old radiology exams performed at the VA. The image is provided via a web viewer. The current state of the industry is limited outside radiologists generally do not import images into their PACS nor view outside images in their PACS.
2. Our Current plan will include a 10 year historic image load to a vendor neutral archive, in full fidelity, for VA radiologists to view historical images in their PACS viewer.

Cardiologists need to access catheterization films in high definition:

See previous answer.

Cerner has no system to alert VA health care workers when a patient is at a particular office or hospital to participate in care management in real time:

Functionality not available today within VISTA. Limited pilots exist in the industry that have provided this alerting to a central facility. Examples are generally not real time and have limited use cases.

From: (b) (6)
Sent: 1 Dec 2017 16:10:11 +0000
To: Windom, John H.
Subject: RE: [EXTERNAL] Answer to Dr Moskowitz questions

Sent...should be coming over

From: (b) (6)
Sent: Friday, December 1, 2017 10:07 AM
To: (b) (6)@va.gov; (b) (6)@CERNER.COM>
Subject: Re: [EXTERNAL] Answer to Dr Moskowitz questions

In air in 20...will send over

Sent from my Sprint Samsung Galaxy S7.

----- Original message -----

From: "Windom, John H." (b) (6)@va.gov>
Date: 12/1/17 10:05 AM (GMT-06:00)
To: (b) (6)@CERNER.COM>
Subject: RE: [EXTERNAL] Answer to Dr Moskowitz questions

Did you send the answers?
Jw

Sent with Good

(b) (6)

From: (b) (6)
Sent: Monday, November 27, 2017 4:20:15 PM
To: Windom, John H.
Subject: [EXTERNAL] Answer to Dr Moskowitz questions

John

I have some answers to the questions posed by Dr Moskowitz...happy to provide as necessary

(b) (6)

Federal Government and Investor Owned

(b) (6)@cerner.com<mailto:(b) (6)@cerner.com> (b) (6)

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From: Windom, John H.
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From: Blackburn, Scott R.
Sent: 27 Nov 2017 07:33:33 -0800
To: Windom, John H.
Subject: FW: [EXTERNAL] Follow up meeting

From: Bruce Moskowitz [mailto:(b) (6)@mac.com]
Sent: Monday, November 27, 2017 10:18 AM
To: Blackburn, Scott R.
Cc: (b) (6)@gmail.com
Subject: Fwd: [EXTERNAL] Follow up meeting

I should point out this would be ideal functionality requirements of any EMR contract if not part of what has been reviewed by the VA we need to discuss these points further since they are derived from the previous meeting points made by the CIO's and we can again cover them in the agenda

Sent from my iPad
Bruce Moskowitz M.D.

Begin forwarded message:

From: Bruce Moskowitz <(b) (6)@mac.com>
Date: November 27, 2017 at 8:41:19 AM EST
To: "Blackburn, Scott R." <(b) (6)@va.gov>
Cc: "(b) (6)@gmail.com" <(b) (6)@gmail.com>
Subject: Re: [EXTERNAL] Follow up meeting

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Thank you

Sent from my iPad
Bruce Moskowitz M.D.

On Nov 26, 2017, at 9:23 AM, Blackburn, Scott R. (b) (6) <[REDACTED]@va.gov> wrote:

Bruce - thanks for the note. I hope you and Marc both had a great Thanksgiving.

Sounds good on all below. Let's shoot for the week of December 11th or December 18th in Washington. If the CIOs can get us the list of issues by December 5th, we will turn around the gap analysis quickly. Happy to work with (b) (6) and Marc on the agenda development - that would be very helpful.

Scott

-----Original Message-----

From: Bruce Moskowitz [mailto:(b) (6)@mac.com]

Sent: Friday, November 24, 2017 7:08 PM

To: Blackburn, Scott R.

Cc: (b) (6)@gmail.com

Subject: [EXTERNAL] Follow up meeting

I am speaking for myself and it would seem to me that holding it at Cerner would restrain an open honest discussion of what is needed to insure that we have all the key pieces to have the the EMR that we all see as a necessity to provide the end users with all tools necessary to provide quality care. The five CIO's are very knowledgeable regarding all capabilities of Cerner. I have been an end user of Cerner and know as do the CEO's the process to quickly move the agenda forward. We are committed to your adoption of Cerner as the EMR however being rushed into a contract without due diligence on our part would be problematic. We can be available for a meeting in Washington ASAP fully realizing some will need to be on a conference call. I would recommend an agenda that reflects the way forward by both groups and

would recommend you allow (b) (6) (b) (6) and Marc Sherman to assist in the agenda development.

Sent from my iPad

Bruce Moskowitz M.D.

From: Blackburn, Scott R.
Sent: 27 Nov 2017 06:39:15 -0800
To: Windom, John H.
Subject: FW: [EXTERNAL] Follow up meeting

FYI. Just got this.

-----Original Message-----

From: Bruce Moskowitz [mailto:(b) (6)@mac.com]
Sent: Monday, November 27, 2017 8:41 AM
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Cc: (b) (6)@gmail.com
Subject: Re: [EXTERNAL] Follow up meeting

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> Sent: Friday, November 24, 2017 7:08 PM
> To: Blackburn, Scott R.
> Cc: (b) (6)@gmail.com
> Subject: [EXTERNAL] Follow up meeting

>

> I am speaking for myself and it would seem to me that holding it at Cerner would restrain an open honest discussion of what is needed to insure that we have all the key pieces to have the the EMR that we all see as a necessity to provide the end users with all tools necessary to provide quality care. The five CIO's are very knowledgeable regarding all capabilities of Cerner. I have been an end user of Cerner and know as do the CEO's the process to quickly move the agenda forward. We are committed to your adoption of Cerner as the EMR however being rushed into a contract without due diligence on our part would be problematic. We can be available for a meeting in Washington ASAP fully realizing some will need to be on a conference call. I would recommend an agenda that reflects the way forward by both groups and would recommend you allow (b) (6) (b) (6) and Marc Sherman to assist in the agenda development.

>

> Sent from my iPad

> Bruce Moskowitz M.D.

From: Blackburn, Scott R.
Sent: 20 Nov 2017 10:43:25 -0800
To: Windom, John H.;Clancy, Carolyn;Lapuz, Miguel H.
Subject: FW: [EXTERNAL] VA-CIO CALL

FYI

Sent with Good (www.good.com)

From: Bruce Moskowitz
Sent: Monday, November 20, 2017 6:01:58 AM
To: Blackburn, Scott R.
Subject: [EXTERNAL] VA-CIO CALL

Dear Scott:

I thought the VA-CIO call November 15 to help you with practical industry expertise relating to your proposed Cerner implementation generated some valuable conversation. The participants were some of the most highly experienced CIOs with deep EMR backgrounds, together with physicians who focus on medical error prevention and improving the EMR experience. I hope and expect that you found it of great value. Since we have not spoken before, you may not be aware that I am the person who personally recruited the Academic Medical Centers to provide the VA with advice, intended to help the VA create and implement a path to fix its care delivery issues, as well as advise on other areas where they can be of value to better veterans' care. I have been a central point for the group and was the collection point for the participants' post-call debrief. Also, for reference purposes, each of the people on yesterday's call has performed flawless implementations of state of the art EMR systems on behalf of their respective healthcare delivery systems, some more than once.

Since the call was structured to focus the discussion on the few direct questions set forth in your agenda, and the moderator controlled the timing of each question very tightly, the breadth of the discussion was somewhat limited. As a result, you only had the benefit of the experts' advice in the areas that the moderator put on the table... and the participant's want to make sure you have the benefit of their complete thoughts and feedback. Everyone felt good about the discussion on the agenda questions and felt that the scope and implementation issues relating to DOD / VA interoperability were well in hand. However, some of the participants' questions raised about other areas left them uneasy about the readiness of the system for implementation or the readiness of the Cerner RFP contract for execution. Based on some of the offshoot discussions, the participants felt that many non-DOD interoperability solutions have not yet been fully addressed or solved, leading to incomplete system planning and contracting protections,

greatly risking an unsuccessful implementation and large additional cost and time overruns. The interoperability with community provider partners did not seem to be defined completely. Some additional areas that were identified by the VA and its contractor's participants and moderator as incomplete in the call are: seamless sharing of Choice partner records, duplicate procedure and medical error prevention, flagging mechanisms and implantable device identification, among others. Until the design of the system and all functional requirements are identified and completed, the participants fear that these as yet undeveloped processes and solutions will result in a significant increase in the cost of the implementation and operation of the Choice program and impact quality care delivery to our veterans who choose to take advantage of the Choice program.

Lastly, at the beginning of yesterday's call your moderator identified the comfort that Congress expressed at recent hearings from the participation of the CIOs in the process. However, yesterday's relatively short discussion on a massive topic was limited and not set up to have a platform for full discussion in a two hour phone call with a few questions. Also, as mentioned in the call at various times, the participants' did not have access to the RFP contract document, its scope and the contractual provisions and protections, a critical part they feel of evaluating the completeness of a successful design and implementation. As such, the participants want to make sure that yesterday's discussion is understood by everyone - the VA and Congress alike - to be a limited dialogue to provide their valuable experiences on the topics put on the table by the moderator, but not as a confirmation of the project's completeness or readiness for contract execution or implementation, which they believe likely has shortfalls. In general, we liked what we heard, we are honored that you felt our advice would be of value, but have had discussion about a very limited part of the project and have questions about the system design, whether it is ready for implementation and whether the contract (from the limited discussion) has adequate safeguards to proceed without risk to the cost and success of the effort.

While this was the first time you have spoken to any of these participants on the topic of EMR, and maybe on any topic, the participants would be pleased to provide further feedback and advice should you desire on the remaining issues that are still incomplete and to help you work toward a successful RFP contract, design and implementation.

Sent from my iPad
Bruce Moskowitz M.D.