VISTA Community Meeting Day Two: January 15, 2011 Morning Session and Day Three: January 16, 2011 Morning Session

Topic: Meaningful Use Plans and Discussion

Presenters: Matthew Greene, Department of Veterans Affairs and Nancy Anthracite, WorldVistA

Note: This topic covered two sessions, during which Mr. Greene and Ms. Anthracite discussed the requirements for Meaningful Use (MU), the extent to which VISTA currently meets those requirements, and what steps are being taken to bridge the gaps.

ePrescribing: currently in use at VA, but they do not currently have the capacity to send electronic prescriptions to private prescribers or retail pharmacies. VA plans to implement this as soon as it becomes available.

Demographic data: VISTA does not currently record a preferred language for each patient. Ms. Anthracite reported that WorldVistA is working on adding ISO 639 codes to the language file, and suggested that they should collaborate with VA on this issue.

Problem List: This generally isn't an issue for VISTA, but vA has identified a couple of gaps. There is no indicator for "no problems exist," and MU requires one. In addition, the way in which the list is maintained doesn't quite meet MU requirements. Ms Anthracite questioned this last assessment, and Mr. Greene explained that some things entered on the Problem List aren't problems within the definition of MU (flu shots, for example). Also, problems are not always taken off the list after being resolved. Ms. Anthracite maintained that the goal should be meeting the requirements for the scripts, which don't necessarily entail the kinds of changes Mr. Greene is talking about.

Q: Has va considered getting Systemized Nomenclature of Medicine (SNOMED) codes into the Problem List?

A (Greene): That's a separate project. It would make things easier for providers.

Maintain an active medication allergy list: The VISTA allergy package does not distinguish between an "allergy" and an "adverse reaction." The proposed solution is to separate the two, so that they are handled differently. Ms. Anthracite noted that there is the capability to note the difference in the comments, which may be good enough for MU testing purposes.

Recording and charting changes in vital signs: The Vital Signs package is not capable of plotting and displaying growth charts for pediatric patients. VA, of course, doesn't treat pediatric patients, but the Department of Defense (DOD) does. VA may be adopting the Indian Health Service (IHS) tools, or they may be adding growth charts as a new requirement to the Nursing Flowsheets software. Ms. Anthracite said that WorldVistA is also working on a couple of solutions.

Q: The Nursing Flowsheets solution that you just mentioned—is that available, or is it still in development?

A: I don't know the specifics; I just know that it was one of the solutions proposed by the subject-matter experts.

Record Smoking Status: VISTA's Health Factors tracking does not exactly match MU requirements. The proposed solutions are to create a standardized National Health Factor for smoking status, or a National Clinical Reminder for smoking status. Ms. Anthracite said that WorldVistA is looking at the reminder solution, and possibly creating a code for smoking status.

Reporting Clinical Quality Measures: The process is not yet fully automated, which is required for Mu. In addition, vA doesn't have SNOMED codes for all factors. The proposed solution is to develop National Health Factors for Electronic Health Record (EHR) vocabulary value sets. Ms. Anthracite said that WorldVistA is doing the same thing, and is associating the Health Factors with SNOMED codes. They are also working on a dashboard to support this element.

Q: How complete is the SNOMED mapping?

A (Anthracite): Not very. The reminders don't connect to SNOMED at the moment. We have a solution that pulls up a SNOMED code when you look at it, which can be used for reports and so on, but it isn't linked to the SNOMED codes in the lexicon. Another issue is that not all international sites use Lexicon. Ihs is a little concerned with the proliferation of Health Factors.

Physician Quality Reporting Initiative (PQRI) Standard: This is not currently being used in VA, and there is no proposed solution so far. It is still in discussion. Ms. Anthracite reported that WorldVistA just did PQRI for 2010, and a lot of today's discussion about the quality measures came out of that project. Their process is to pull a Continuity of Care Record (CCR) out of VISTA and use the CCR to create a Continuity of Care Document (CCD), which can then be modified to create a Quality Reporting Document Architecture (QRDA) report that can be submitted.

Provide electronic copy of health information: This is one of several requirements that have similar gaps and similar proposed solutions. Electronic patient summary records cannot be displayed in ASTM CCR format (ASTM originally stood for the American Society for Testing and Materials, but now officially does not stand for anything). The proposed solutions are to use a CCR/CCD mapping tool and viewer, or to tie in a solution with the Logical Observation Identifiers Names and Codes (LOINC) migration. Ms. Anthracite mentioned that IHs has been working on a LOINC migration, and has just released a KIDS build. WorldVistA is looking at it and VA should be able to use it as well. WorldVistA also has a tool that converts a CCR to a CCD being developed by Ken Miller, and it's pretty far along. Presumably, it could also be adapted to work in reverse.

Provide electronic copy of discharge instructions: The VISTA Health Summary does not have a specific component for discharge instructions. Va's proposed solution is to identify enhancements that would enable discharge instructions to be included. Ms. Anthracite added that WorldVistA is working on a solution, but they have decided it would be more appropriate to keep discharge instructions separate from the Health Summary.

The next two requirements are: "Provide clinical summaries" and "Exchange clinical information." These have the same gaps and proposed solutions as "Provide electronic copy of health information" detailed above.

Protect electronic health information, which has nine different sub-categories. When VA met with the business owners about exchanging information, they realized that they also needed to look at non-VISTA applications that are being used to exchange data outside VA and ensure that they also have these measures in place. VA hasn't looked at that yet.

Q: Most of our thoughts about this have been XML solutions, including the CCR/CCD. There's also point-of-care output from Lab. Have you looked at HL7 feeds as a way of putting information out? A (Greene): We haven't gotten that far yet.

Q: So, your basic approach it to first see what vA is doing, and then add to that? A (Greene): Right. Identify the gaps, and talk to the business owners, who propose solutions. Some of the things are at a higher level, without the detail that is being discussed here.

Gap: Audit log capabilities not consistent across VA EHR applications. The proposed solution is new audit log services requirements, which have been submitted.

Q: You're talking about places where the MUMPS code doesn't call Fileman to keep track of things in the Audit log?

A (Greene): That's more specific than we've gotten.

Q: There's also a Kernel ability to edit options in the Kernel system parameters file, and there may be some Class III software available for some audit log functions.

Gap: Encryption is not present for all data transmitted. The proposed solution is to deploy host-based intrusion detection systems to detect alterations to the audit log, and to deploy Attachmate for encrypting data in transit.

Q: Using an SSH connection rather than a Telnet connection?

A (Greene): I don't know. We haven't gotten that far yet.

Q: A lot of sites outside VA are going with SSH tunnels.

Gap: Verify that a person or entity seeking access to electronic health information is authorized to access such information. VISTA seems to be okay on this, but VA needs to ensure that other EHR applications also meet the standard.

Q: There's also the frustration that the computer can't tell who the human is at the keyboard; just that the person knows the passwords. Biometrics and Smart cards can help. A (Greene): Okay.

Gap: Legacy VISTA does not use high enough encryption. The Office of Information and Technology (OI&T) is currently implementing encryption of all communications across VA. Implementation of Attachmate is proposed. Other proposed solutions include Public Key Infrastructure (PKI) certificates issued for servers rather than individual users.

Q: Both major MUMPS implementations encrypt the data on the disk drive when it isn't currently being used. That's beyond the level required. Its is using Cache encryption successfully. A (Greene): Okay.

Gap: Health information exchanged over the VA wide area network is not protected. There are no proposed solutions so far.

Q: You may find that some of the solutions discussed already for electronic transmissions will address this. If OI&T is encrypting the wires, it should apply to the LAN as well. PKI is also available for encrypting emails.

A (Greene): Okay.

Accounting of disclosures is optional for MU. However, VA has identified a gap in that other (non-VISTA) EHRS may not be doing this properly. The proposed solution is to determine the extent to which these other EHRS are accounting disclosures.

Q: How do you interpret "disclosures"? Telling somebody else about lab results or something more?

A (Greene): I'm not sure. We need to look at that.

Implementing drug formulary checks. Gap: not implemented across vA. It has been requested repeatedly. Currently many facilities are using their own web-based versions. The proposed solution is that requirements have been submitted. Ms. Anthracite said that for the ePrescribing vendors, there's a database of formularies that's available to them. For hospitals, the Drug file or Orderable Items may suffice.

Incorporating Lab Results: At the moment, non-va lab test results cannot be entered into VISTA as structured data. Va doesn't have the latest version of LOINC, and not all tests have LOINC codes anyway. Va is using HL7 2.3, which is not the one requested for MU. Names and locations of labs have to be entered manually. Ms Anthracite said that, as a stopgap measure, WorldVistA planned to use the point-of-care interface to assist in reconciling orders with results.

VA's proposed solutions include adding a section to CPRS for non-VA lab results, along with a disclaimer stating that the testing was done outside VA. In addition, VA is looking at LOINC migration and HL7 version 2.5.1 (for which a requirement has been submitted).

Generate a list of patients by specific conditions. VA's proposed solution is to generate the list using existing data pools.

Provide patients with timely access to medical records: My HealtheVet does not currently provide access to lab results and allergies; medication extracts are not standards-based. Proposed solutions involve new standards which call for collecting metrics for chemistry/hematology. Ms. Anthracite added that WorldVistA's solution involves a personal health record, which will take information from the CCR and display it with a secure login. WorldVistA felt strongly for privacy reasons, that the primary thing was to have a system that could be hosted locally and kept private.

Medication Reconciliations: VISTA does this, but not seamlessly. The proposed short term solution is to continue patching. Long-term solutions involve the transition to AVIVA; requirements have been submitted. Ms. Anthracite said that WorldVistA had come up with a work-around solution for this one, but she did not recall the details. She said she would need to get back to Mr. Greene on the specifics.

Providing a summary of care for each transition of care or referral. This has the same gaps and proposed solutions as "Provide electronic copy of health information" detailed above.

Submitting electronic data to immunization registries. The capability exists, but VA doesn't currently exchange data with these registries. In addition, VA uses HL7 version 2.4, rather than 2.5.1. Also, VA is implementing the CVX standard, but it is an internal standard based on CVX and doesn't use the CVX native codes. It won't match exactly. (CVX is a coding system for vaccines used by the Centers for Disease Control (CDC)). Ms Anthracite indicated that WorldVistA plans to take the list of CVX codes that the CDC provides and import it into VISTA. Looking forward, WorldVistA sees a strong possibility that EHRs will need to accept data as well as transmit it, and different states will have different fields that need to be supported. In Ms. Anthracite's opinion, it would be better if WorldVistA and VA handled this in the same way so there could be collaboration and standardization. She added that IHs has a richer immunization file that might be a good model to work from.

Submitting reportable lab results to public health agencies. There is no national process for electronically submitting results to public health agencies. Reporting tools are being developed but are in early stages. Not using version 2.5 of HL7 or current LOINC. Ms. Anthracite added that WorldVistA had been talking about this, and one of the new Lab patches has the ability to subscribe to lab results in HL7. WorldVistA proposes using this capability and filtering the output for submission to the agencies. She believes the patch is LR68.

Submit Syndromic Surveillance Data to public health agencies. There is currently no consistent response to syndrome surveillance. There is a prototype in Palo Alto with the local county health department, which may form the basis for vA's solution. Ms. Anthracite pointed out that the requirements for this item have recently been changed. EHRs can basically send any message they want.

Ms. Anthracite added that she is interested in working with vA to standardize the chief complaint. A potential place to put it might be EDIS, because they do have a chief complaint there.

That was the end of Mr. Greene's gap analysis list. He reiterated that the business owners had been asked to propose higher-level solutions, and that in most cases, VA has not yet formulated detailed plans. He is interested in cooperating with WorldVistA.

Plans for further meetings and discussions were outlined.