VISTA Community Meeting Day One: January 14, 2011 Afternoon Session Topic: AVIVA and EDIS *Presenter*: Kevin Meldrum

[Note: Mr. Meldrum did not attend the conference in person, but joined the afternoon session via conference call.]

The goal of these projects is making the code more open-source and more readily available. The team is developing in a series of "sprints."

AVIVA is a modular GUI layer. Under it are common service applications (akin to VISTA). At the base is what is called the "virtual patient record," which pulls records from VA, DOD, and hopefully soon other sources. It is a consolidated, normalized patient record.

Q: Where will applications such as Lab and Pharmacy sit?

A: For the health management platform, they are an HL7 connection. This doesn't address things like Lab or Scheduling, although it could.

AVIVA has been built from the bottom up. Mr. Meldrum began with the work to create the virtual patient record. The concepts from VISTA were mapped into HITSV, so that the data would line up.

Q: Are you aware that HITSV has been dissolved?

A: Yes.

Q: Are you planning to move this to something currently supported?

A: Well, we knew that the government had set it up to sunset.

Two challenges: getting the schema to match the data, and transferring things such as allergy products, which have different terminologies (for example, SNOMED[Systemized Nomenclature of Medicine]).

Q: We'd like to see the VA make that available.

A: That's something we're working on big time. That's an advantage to having a high-level initiative, and it's starting to happen.

Q: The Sanders committee has indicated support for a major unified approach to vocabularies used in EHRS. How is the VA doing that, and how are they working with the Library of Medicine and other groups? You mentioned SNOMED CT(Clinical Terminology), and SNOMED CT was identified as international vocabulary.

A: I don't know the details, and I'm not a terminologist. I know that there is an emphasis now on SNOMED CT and making it more complete, but I don't know any more details.

On top of the patient records, there is a set of restful services that gets data out of the records. Every piece of information in the patient record is represented with a URL.

Q: You guys are looking at H-Data then?

A: This is just HTML, and uses essentially the same terms as HITSV.

Q: So is the goal to put out code that folks can use to build their EHR?

A: To build an EHR, yes. It's a collection of services. But people can build whatever they want to build on top of it.

Q: This is similar to something we're looking at as well. They are using H-Data. We've been talking about that on our CCR/CCD project. A: Yes, we think this has a lot of potential.

Right now, AVIVA has a very crude UI. The first application is a search; the virtual patient record also creates an index to make it more searchable. Mr. Meldrum demonstrated the search function, and another completed feature, a Table of Contents for Lab.

Q: I think most providers will want a double-screen; one with CPRS and one with something like this.

A: Yes. It's tricky, because CPRS is in such heavy use.

Q: When is this coming out?

A: They are starting with a pilot site in March, and try some of these apps. We will let VHA decide at what point they want to release to other sites. We want to keep the pilot site concept in place and not get bogged down.

Q: What web-enabling technology are you using?

A: We're looking at AJAX, but I think this one is Flex. We're trying to make it more open, so that people can put their widgets in whatever they want.

Q: Flex is Adobe?

A: Flex is Adobe, yes

Q: Have you considered EWD?

A: Well, that's pretty much the way Flex works. We chose Flex some years ago because Adobe open-sourced the toolkit, and the support for the JAWS readers was really good.

Q: How is AVIVA tying in to Meadows?

A: We're working together. We use Meadows to get some of the remote data. It's a dot-net application.

Q: Meadows is a cousin to VISTAWeb?

A: VISTAWeb uses MDO (Medical Data Objects); Meadows puts them in wrappers.

Q: Basically Meadows is a method of getting data from the VISTA system, but doesn't do anything about displaying it?

A: Right, Meadows is a data adapter.

Q: Can we do a FOIA request for the Meadows software?

A: Probably. It's not Class I software yet, but they are using it.

Moving to EDIS.

EDIS is a precursor to AVIVA. It's a select application that runs in a browser. The server is thin; it basically passes calls to VISTA. Most of the logic in EDIS is written in MUMPS. It's a program to basically track patients through the emergency room. The information is displayed on plasma screens, which can be configured to show more or less information (different info for nurse's

station and waiting room, for example). The displays are color-coded, and the coding can be changed.

Mr. Meldum demonstrated entering a patient into the system, showing how the information could be configured to display in different ways.

Q: Is this being used for syndromic surveillance?

A: Not that I'm aware of. The diagnosis is probably what they'd use for that, because it's coded. It may be happening, but I'm not aware of it.

Q: There will be enhanced interest in this because of Meaningful Use. We've been wondering where to store the chief complaint.

A: If we could've done a second round on this project, we wanted to get the chief complaint more coded.

Q: Were you thinking of using SNOMED?

A: Yes. That's sort of where we were headed, and then we got switched over to AVIVA. And maybe this will be combined with AVIVA; we're not sure.

Q: Can we put chief complaints in the form of a health factor?

A: It would be better to get them into SNOMED, because health factors aren't coded in any consistent way.

Q: This got released? So we could get access to some of this?

A: Yes. And the VISTA files are out there.

Q: How is the display board 508-compliant?

A: The colors are always also represented by something other than color, so there are two ways to see everything. We send guidelines about using hues, which colorblind people can still see them. (Mr. Meldrum briefly demonstrated these features.)

Q: What is the namespace for EDIS? How are the beds defined and where are they sorted?

A: EDP is the namespace. The numberspace is 230-234. When you set up your emergency department, you define your rooms and areas. They can be conceptual or physical areas. That's all configured (here). You can also specify different boards, for example for different wings. Q: I was wondering if you had somebody in Bed 4, and sent an order to pharmacy, would the pharmacy know where to [send the order if the patient had been moved].

A: We couldn't use the location file, so we ended up doing their own thing, so [in that case] the pharmacy wouldn't know about it.

Q: Do you know anything about bringing SNOMED into this?

A: Yes, there's actually a project to bring in the problem list, but it was back-burnered.

Q: It hasn't been released?

A: It hasn't been released.

Q: Do you know what it's called? In case we can FOIA it?

A: Joe Russell is the programmer; I can't remember the official name.

Q: Do the patients need to be manually discharged?

A: Yes. (Mr. Meldrum demonstrated this process.)

Q: Does it update automatically, or is it a standalone?

A: It has hooks into Lab and Radiology.

Q: It's integrated with Lab and Radiology, but not patient movement?

A: It is tied into Scheduling, but it's solely aimed at the Emergency Department right now. There is a request for the next version to be more tied in with Admissions, to check for bed availability and so on.

Q: When was this released?

A: The end of November, I think. I can't remember the exact date.

Q: What about the code for the Flex components?

A: It would be separate files. There's a Java project and a Flex project. There isn't a roll-and-scroll version. All the calls return XML.

Q: Are you familiar with EWD?

A: I'm not; I just wrote it down.

[There was a general agreement that Mr. Meldrum should get in contact with Mr. Tweed about EWD. Contact information was exchanged.]

Q: Is there anything in the VISTA Documentation Library?

A: Yes.

Q: Any idea where?

A: Under Clinical.

Q: So, we do need a FOIA request for the GUI portion.

A: Yes, probably. I do know where the code is.

Q: What is the zip file on downloads.va.gov?

A: I suspect that's the bit that sets up the kiosk. You don't want to try to install that.