

MINUTES – FINAL
Health Information Technology Standards
Advisory Committee (HITSAC)
Thursday, October 20, 2011

Commonwealth Enterprise Solutions Center
11751 Meadowville Lane
Chester, VA 23836
Multipurpose Room 1222

ATTENDANCE:

Members Present:

Dr. Marshall Ruffin, Chairman
Dr. Sallie Cook
Dr. Jim Harrison
Rich Pollack
John Quinn

Members Absent:

Others Present:

Dave Mix, DMAS
Kim Barnes, VDH
Debbie Secor, VDH
Joseph Grubbs, VITA/MDG – HITSAC Administrator
Lynn Bannister, VITA/MDG
Lynne Jeffries, VITA-MITA Program Manager
Todd Kissam, VITA/PP&A
Kim Martin, VITA/EDM
Jesus Valencia, IBM
Keith Gordon, IBM
Ali Nardacci, Astyra
Julie Murphy, VDH
Sandy McCleaf, CHA
Tobin Joseph, VDH
Dheeraj Katangur, VDH
Jerry Simonoff, VITA/ESG
Mike Farnsworth, DMV
Pat Reynolds, VITA
Don Parr, Deloitte
Fred Norman, CVC, LLC
Christian Duke, IBM
Andy Harmond, IBM
Tom Mallon, IBM
Chris Whyte, Vectre
Greg Ackerman, IBM
Carl (CW) Laugerbaum, Advantus Strategies
Akeisha Heard, VITA/EAD
Susan McCleary, VITA/EAD

Call to Order:

Chairman Marshall Ruffin called the meeting to order at 10:40 a.m. in the VITA Multipurpose Room 1222 at the Commonwealth Enterprise Solutions Center in Chester, VA. Chairman Ruffin welcomed HITSAC Members, staff and attendees.

OLD BUSINESS:

Approval of Minutes from the August 18, 2011 HITSAC Meeting

Chairman Ruffin called the item to approve the minutes from the August 18, 2011, meeting and asked HITSAC Members if they had changes or corrections. Seeing none, Chairman Ruffin called for a motion to approve the minutes. A motion was made by Mr. Quinn with a second from Mr. Pollack. The motion passed unanimously.

NEW BUSINESS:

Master Data Governance (MDG) Team Status Report – Transition

Chairman Ruffin raised the agenda item relating to the transition for VITA's Master Data Governance (MDG) Team and HITSAC administration by recognizing the accomplishments made by Susan McCleary, the outgoing HITSAC Administrator, and Akeisha Heard, Data Analyst. HITSAC Members presented Ms. McCleary with a plaque as a symbol of their appreciation, and a group photograph was taken of HITSAC Members, Ms. McCleary and Ms. Heard to commemorate the event.

Chairman Ruffin introduced Joseph Grubbs, Ph.D., as the incoming HITSAC Administrator and Lynn Bannister as the MDG Data Analyst. Dr. Grubbs and Ms. Bannister gave brief summaries of their professional background. Dr. Grubbs then provided a status report on the MDG Team transition, highlighting progress on team staffing and project coordination.

Dr. Grubbs noted that the first set of the Health Interoperability and Vocabulary Data Standards had been approved by the Secretary of Technology on October 19, and that the supplemental set would be routed for approval in the coming weeks. He added that the Person Core Matching Data Standard also had been routed for review and adoption by the Secretary.

Health Information Technology/Medicaid Information Technology Architecture (HIT/MITA) Program Status Report

Dave Mix, Department of Medical Assistance Services (DMAS), provided a status report on the Health Information Technology/Medicaid Information Technology Architecture (HIT/MITA) Program. Mr. Mix indicated that they have completed staffing of the Program Management Office (PMO) and proposals for the Project Office services procurement were due by October 25.

Mr. Mix highlighted the current PMO Initiatives. The first initiative Mr. Mix discussed was the Data Sharing Committee, which is working to establish recommendations relating to data-sharing agreements. Mr. Mix said that one of the outcomes from the Committee may be a Commonwealth-wide Data Use and Reciprocal Support Agreement (DURSA). Chairman Ruffin asked if the DURSA would be completed by the end of the (calendar) year. Mr. Mix said that the committee currently was working on its recommendations and that the Office of the Attorney General (OAG) had been called in to assist. Mr. Mix anticipates that the HIE vendor will be engaged in this process with the outcome that any participant in the HIE would be able to exchange data under the DURSA.

The second initiative described by Mr. Mix was the Secretary of Health and Human Resources (HHR) IT Strategic Planning Committee. Mr. Mix said the committee expects to complete its work by the end of November, and the draft HHR IT strategic plan then would go under review at the agency director level. Once approved, the HHR IT strategic plan would drive agency level IT strategic plans. Updates to agency level IT strategic plans are

due by the end of October, and Mr. Mix indicated that the agency IT strategic plans will align with the HHR IT strategic plan. Chairman Ruffin asked if the agency IT strategic plans rolled-up to the HHR IT strategic plan. Mr. Mix confirmed and added that the HHR IT strategic plan itself was aligned with Commonwealth and Federal direction. He said that driving the alignment at the Federal, Commonwealth, Secretariat and agency level will be the standards developed under direction from HITSAC, which will ensure interoperability and enterprise functionality.

Mr. Mix gave updates on the Service-Oriented Architecture (SOA), the Enterprise Data Management (EDM), and Commonwealth Authentication Service (CAS) projects. On the Care Management dimension, Mr. Mix described the proposed projects and said that funding requests were still pending with the Federal sponsor, the Centers for Medicare and Medicaid Services (CMS). Chairman Ruffin thanked Mr. Mix for the efforts of the PMO in keeping HITSAC informed of the project and its coordination. Mr. Mix went on to provide the status of the MITA Member Management project, Phase I & II.

Chairman Ruffin asked Mr. Mix if there were concerns regarding whether Federal funds would be forthcoming. Mr. Mix said he was not concerned about funding for Care Management since these projects fell under the Recovery Act (American Recovery and Reinvestment Act of 2009, ARRA). However, the projects targeting replacement of eligibility systems, which were funded under the Federal Patient Protection and Affordable Care Act (PPACA), may be questionable due to the ongoing legislative and judicial challenges to the legislation. Mr. Quinn added that the issue of Federal funding for any health IT initiative remains in question given the current fiscal/political climate in Congress.

Mr. Mix agreed but said the PMO would continue to move forward in its current direction. Chairman Ruffin said that was the best approach and asked whether the Commonwealth had funding for health IT projects, given that consolidation of eligibility systems would be a major cost savings. Mr. Mix responded that the Commonwealth's budget did not have funding allocated.

Mr. Mix wrapped up the status report stating that the agency was about to post the Notice of Intent to Award for the administrative contract under the Provider Incentive Program (PIP) and that the PIP's Extension Center Sole-Source Contract was in the CMS clearance process. Overall PIP launch was on track for May 2012, he said.

Health Information Exchange (HIE) Program Status Report

Kim Barnes, Director of the Virginia Department of Health's (VDH) Office of Information Management, gave the status report on the Health Information Exchange (HIE) program. Ms. Barnes indicated that VDH was in the final stages of evaluation for the HIE vendor. She said that given the magnitude of the project, VDH had been diligent in reaching out to other stakeholder agencies and entities to gather input on the vendor evaluation. Ms. Barnes reported that VDH had dedicated the necessary time to ensuring the most effective selection process but hopes to be able to report to HITSAC at its next meeting on the vendor chosen for the HIE project. Chairman Ruffin thanked Ms. Barnes for her hard work during vendor selection.

VITA MITA Program Status Report

Lynne Jeffries, project manager for the VITA MITA Program, gave the program status report. Ms. Jeffries identified OAG's review of the IBM Implementation Services contract as being the primary issue. She said that the decision had been made to procure the services via a U.S. General Services Administration (GSA) contract mechanism. The Commonwealth was pursuing this option through an IBM reseller and, she said, OAG was working with the necessary entities to reach agreement on the terms and conditions.

Ms. Jeffries reported that progress had been made on gathering business requirements for EDM and SOA, developing administrative processes and reaching a data-sharing relationship with the Department of Social Services (DSS) for the pilot sample data extract. VITA also was successful in standing-up the IBM WebSphere Enterprise Service Bus (WESB) for the DSS Customer Portal test environment. On the infrastructure side, Ms. Jeffries said that VITA staff continued to work with the Department of Motor Vehicles (DMV) on the Identification Management tools for CAS and on the required database technology. Ms. Jeffries noted that work requests have been submitted for the IBM Power7 servers and that the delivery of the environments was expected by mid January 2012.

Under the EDM project, Ms. Jeffries said that progress had been made on developing a strategic plan for the EDM Competency Center. Chairman Ruffin requested clarification on the Commonwealth's use of the term "Competency Center." Ms. Jeffries responded that this was the same as the industry term, "Center for Excellence." She explained that the Competency Center would be the customer-facing entity for EDM, providing client-side support. Ms. Jeffries said a parallel entity would be developed for SOA. Chairman Ruffin acknowledged that substantial progress had been made in each of these project areas and, despite delays with contracts, the program was moving forward.

Ms. Barnes commented on the feedback received from the Office of the National Coordinator for Health Information Technology (ONC, U.S. Department of Health and Human Services) regarding the progress being made by the Commonwealth on HIE and the MITA vision. Chairman Ruffin asked Mr. Quinn if he had received similar feedback in his work at the Federal level. Mr. Quinn stated that he had and that while consortia of states may be functioning with greater visibility the Commonwealth was seen to be working at a higher degree of effectiveness. Chairman Ruffin concurred then concluded the status-report items on the agenda.

IBM Presentation (Part #1)

Chairman Ruffin called on the IBM representatives to give the first part of their presentations, which focused on WebSphere and the Initiate Master Data Service. Keith Gordon from IBM started the presentations with an overview of WebSphere, focusing on Transformation Extender (referred to as "TX") and the Healthcare Content Pack. He highlighted the capacity of TX to transform any type of data (e.g., relational, hierarchical) via "any-to-any" or "many-to-many" conversion processes. Mr. Gordon noted that TX includes a data-validation functionality so that the transformations maintain data integrity and compliance with embedded rules. He stressed the importance of clients knowing their data as a key requirement to successful TX deployment and related programming.

Mr. Gordon shifted to the Healthcare Content Pack for TX, which comes configured with HL7, U.S. Health Insurance Portability and Accountability Act of 1996 (HIPAA), and National Council for Prescription Drug Programs (NCPDP) standards. Mr. Gordon said that IBM maintains the Healthcare Content Pack to ensure consistency with the HL7, HIPAA and NCPDP standards, enabling clients to perform data transformations in validated, compliant and regularly updated data-standard format(s).

Dr. Harrison raised the question of mapping data based on the Logical Observation Identifiers Names and Codes (LOINC) standards within the Healthcare Content Pack. He asked who is responsible for the LOINC mapping and where does the LOINC mapping occur in the data transformation. Mr. Gordon responded that the Commonwealth's configuration of TX and the Healthcare Content Pack, as scoped for the HIT/MITA Program and related projects, would place the mapping in a central location, namely within the Enterprise Service Bus.

Chairman Ruffin asked Dr. Harrison if this raised a concern, and Dr. Harrison replied that it will be good to address these and similar issues in more detail. The primary question, said Dr. Harrison, is what gets mapped to what LOINC codes, who decides on the mapping, what tests go to what codes. He also stressed that centralized mapping would come with a substantial work load and wanted to make sure the Commonwealth had planned for this requirement. Mr. Quinn added that over time labs would be expected to use LOINC standards natively, and therefore ensure interoperability with centralized mapping. Dr. Harrison said that the issue of labs doing their own LOINC coding, and the corresponding resource requirements, was a matter currently under discussion.

Dr. Harrison asked a follow-up question regarding the transformation rules embedded in the Healthcare Content Pack and whether the application contains tools for managing and maintaining the transformation rule list. He said the magnitude of the rule list, rule dependencies and required updates will produce significant and ongoing maintenance and management tasks. Mr. Gordon responded that at the level referred to by Dr. Harrison the types of rules and processes would be managed at the map level via a source-code control system. Otherwise, there is not a specific rule-management capability, Mr. Gordon said. Dr. Harrison confirmed that the rules would be maintained in a change-control system, which would be specified separately. Mr. Gordon concurred.

Chairman Ruffin cited this type of question as an example of how HITSAC needs to develop a process, with MDG staff, to log HITSAC member questions and the response from project teams and vendors. Chairman Ruffin asked Dr. Harrison if he would like to ask a specific question at that time or prepare a more detailed question to submit later. Dr. Harrison said he would submit the question at a later time. Dr. Grubbs encouraged HITSAC Members to pose questions to the IBM team throughout the meeting but also to submit any further questions to him, so that he could work with the IBM team on detailed responses. Dr. Quinn acknowledged the need for this level of discussion and that Dr. Harrison's questions represented the next level down that will be necessary to define the architecture's technical requirements.

Chairman Ruffin said that Dr. Harrison's question raised his awareness of the technical challenge, specifically how the central authority would know how the lab defined the codes. Dr. Harrison said the issue of lab coding presented another question of whether the Commonwealth's system would require smaller labs to dedicate substantial resources to LOINC coding and how this could be validated. He said these types of issues would confront the Commonwealth both in the context of lab reporting and the application of other standards.

Mr. Gordon concluded his presentation by demonstrating TX functionality with a transformation of data from an HL7 (v. 2.3) format into an XML format. Dr. Harrison asked about the element names in the XML format and whether they were based on an adopted standard. Mr. Gordon said that the XML element names were not standardized but based on a user-defined schema. Mr. Quinn reported that HL7 did provide a recommended XML syntax as part of HL7 v. 2.

Jesus Valencia from IBM concluded the morning session by giving an overview of the Initiate Master Data Service. His primary focus was on the architecture of the Initiate Platform, the data hubs, matching criteria and algorithms for member linking and Initiate's relationship functionality.

Chairman Ruffin asked if other states were implementing Initiate in the same way as envisioned for the Commonwealth. Mr. Valencia cited North Dakota and Maryland as other existing state implementations of the Person hub; he added that Massachusetts was planning to implement the Provider and Organization hubs. Chairman Ruffin requested for Mr. Valencia to save the Initiate demonstration until after the lunch break.

Chairman Ruffin recessed the meeting for lunch at 12:10 p.m.
Chairman Ruffin called the meeting back to order at 12:45 p.m.

Mr. Valencia continued his presentation with a demonstration of the Initiate Master Data Service. He showed how Initiate features a probabilistic matching algorithm for linking individual records to create a “golden record.” Mr. Valencia described the categories of match – auto-linked, not linked and “tasks” that require manual (human) review. Chairman Ruffin asked Mr. Valencia about the different types of attributes that could be used for matching and their weighting, giving hair color and shoe size as examples. Mr. Valencia said those attributes could be used but that Initiate worked best with more robust, well-populated attributes.

Mr. Valencia demonstrated the relationship capabilities of Initiate, establishing relationships and hierarchies between the various hubs. He gave examples of a Patient, Provider and Organization relationships and Household relationships.

Chairman Ruffin asked Mr. Valencia to define the term “tasks” in Initiate. Mr. Valencia defined the term as the process of manual review, i.e., the human analysis of match scores that fell between the “not-linked” and “auto-linked” categories. Chairman Ruffin concluded Part 1 of the IBM presentations.

Master Data Management (MDG) Team Work Plan & Project List Summary Report

Dr. Grubbs provided a summary report of the MDG Team’s work plan and project list under the HIT/MITA Program. He started by placing the HIT/MITA-related scope in its broader context, with an emphasis on the MDG Team’s role in a Commonwealth-wide data governance strategy. Dr. Grubbs discussed the close coordination with the HIT/MITA Program Office and VITA’s MITA Program teams on the work plan and project requirements. He then provided an overview of the data standards included in the MDG Team project list.

Chairman Ruffin asked the question of whether a “Work Place” hub may be of value, particularly for epidemiologists. Dr. Grubbs said this could be accomplished through a “works-for” relationship between the Person and Organization hub, then deferred to Mr. Valencia from IBM. Mr. Valencia concurred with Dr. Grubbs’ example but said it also could be done through creating its own “Work Place” entity.

Mr. Mix asked where this data would come from, and Mr. Valencia said from the source data systems. Mr. Mix raised concerns regarding the complexity and work-load required to maintain data at this level. Mr. Quinn cited a patient-update code in HL7 that could accomplish this type of attribute and related rules, but added that adopting such a mechanism would raise important data governance questions for systems maintenance.

Mr. Mix said that the EDM system would provide data-usage challenges, since this will be the first place that data will be comingled from across Commonwealth agencies. He said the data-sharing committee also will need to address these issues. Mr. Quinn said that he has experienced these types of questions with demographic information embedded in Master Patient Index (MPI) records. Chairman Ruffin acknowledged the challenges but re-stated the value of these data, particularly for epidemiologists.

IBM Presentation (Part 2)

Chairman Ruffin recalled Mr. Valencia for the second part of IBM’s presentations. Mr. Valencia began by giving a brief slide presentation on IBM’s Provider registry solution for Initiate. He described the Provider registry as being designed based on best practices across the healthcare industry, with the embedded data model and

matching algorithms reflecting these best practices. Mr. Valencia said the Provider solution represented an effective tool for maintaining updated provider information, which in turn can help save cost and increase healthcare system efficiency.

As an example, Mr. Valencia cited the 7.3% of providers that failed to update the licensure information. Chairman Ruffin asked for clarification, whether this meant that the notification to the provider to renew licensure failed to reach the provider due to a wrong address or incomplete identification. Mr. Valencia said that these were some of the main problems addressed by the Provider solution.

Mr. Valencia distinguished between the way Initiate maintains records for “Providers” and “Organizations.” He said individual healthcare providers (humans) reside in the “Provider” hub and the physical collection of providers – so called “brick and mortar” facilities – in the “Organization” hub. The main reason for this, Mr. Valencia said, was to enable different types of relationships between the Provider and Organization hubs. For example, an individual physician in the Provider hub could have one-to-many relationships with hospitals, a general practice, specialty practices, etc. in the Organization hub.

Mr. Valencia identified a major benefit of a Provider registry in Initiate as being the tool’s ability to consolidate provider information from across source systems and platforms. This enables a wide range of search functions for entities within the healthcare domain. It also provided a platform for updating and validating provider data more efficiently, he said. Chairman Ruffin agreed saying it was vital for a registry to reflect the various roles that providers may serve across different organizations and the need to maintain this information over time. Chairman Ruffin cited the requirements for setting up access rights in an Electronic Medical Record (EMR), particularly if the EMR set-up differed by location.

Chairman Ruffin asked if the Commonwealth’s Department of Health Professions (DHP) was participating in the modeling effort and planning. Mr. Mix said DHP was involved and that the EDM project team was in the process of getting DHP’s public file for the Commonwealth’s provider registry. DHP publishes its public file on the Virginia Interactive (VI) Web site, Mr. Mix said, which supports public queries of licensure information for healthcare providers. Mr. Quinn identified the problem of maintaining a Commonwealth-wide licensing or credentialing system. Chairman Ruffin agreed, saying it is challenging enough to maintain a provider registry for a single medical center.

Mr. Mix said the Commonwealth only maintains provider licensure information and not the “organization” information for where each provider practices. Dr. Cook responded that some of that type of information is located in the Commonwealth’s health provider data, which is publicly available. She said this source features a list of provider-practice locations. Mr. Mix acknowledged and added that the key challenge is making sure that information is correct and up to date.

Dr. Cook asked a follow-up question, whether the array of healthcare organization types, e.g., long-term care facilities, nursing homes, assisted living, rehabilitation facilities, would be included in the Organization hub. Mr. Valencia confirmed they could be included. Chairman Ruffin agreed, saying that what categories to be included would be up to the Commonwealth. Mr. Pollack said that the important first step toward building the registry would be for data owners to “clean-up” the source data before extracting and loading into the new system.

Mr. Mix posed the question of how much of the Provider and Organization data should be maintained within the HIE as opposed to the Commonwealth EDM. He asked if the Commonwealth EDM needed to maintain these data at all if they will be in the HIE, or would this present the problem of storing and updating duplicate data. These questions, Mr. Mix concluded, would need to be worked out once the HIE vendor came onboard.

Mr. Valencia agreed and said this should be addressed as the Commonwealth worked out issues regarding the sources of the Provider and Organization data.

Chairman Ruffin asked about the ability to “nest” the provider and organization information, where one provider would be “nested” within multiple organizations, i.e., a provider working within a group practice, which in itself is part of a contracting entity, which may be contracted with a hospital. Mr. Valencia said that this type of “nesting” would be accommodated by the relationships defined in the Initiate platform. Chairman Ruffin clarified that an individual would be in the Provider hub and a collection of individuals in the Organization hub. Mr. Valencia confirmed, saying that this type of relationship hierarchy would be anticipated in the system requirements. Chairman Ruffin said this would be very important, giving an example of the University of Virginia’s health system.

Mr. Valencia described the types of attributes stored in the Provider hub. He referenced the Provider Direct extension for Initiate, which supports direct updating of provider data. Mr. Mix asked if Initiate would store as an attribute the types of insurance that a provider accepts. Mr. Valencia said this information could be stored in the Provider hub, the Organization hub or in a separate hub. Mr. Mix said this would be helpful, noting that DMAS maintains this information in its provider registry enabling providers to search for other providers or specialists who accept Medicaid and are located in close proximity to the patient. Mr. Quinn said it would be important to determine where this information would be maintained, which entity(ies) would be responsible for maintenance and through what system interface.

Chairman Ruffin asked how the referring provider would be captured in Initiate, such as when a payer approves the referral from a primary care physician to a specialist. Mr. Valencia said this information could be stored as an attribute within the appropriate hub. Chairman Ruffin asked Mr. Mix and Ms. Barnes about system functionality, namely if the system would be designed strictly for HIT/MITA or for broader Commonwealth-wide applications. Mr. Mix said initial functionality would be driven by HIT/MITA Program requirements but added that the tool would be flexible enough to accommodate other applications.

Chairman Ruffin acknowledged that the first payer would be Medicaid given the MITA vision but that other payers could be added. Mr. Mix agreed saying that the Virginia Healthcare Exchange Network (VHEN) – the “payer portal” – could be a source for other payer information. Mr. Quinn noted the importance and relevance of this particular use-case but added that this case – like others in healthcare – was extremely complex. He cited as an example the complexity in tracking a process of multiple referrals both for payer purposes and for clinical-care purposes. Mr. Quinn said identifying these types of issues will require a high-degree of use-case analysis by the system designers.

Mr. Valencia explained that the primary steps in developing the Provider hub will be to determine the Commonwealth’s requirements and design the data extract and load based on data profiling of the Commonwealth’s source data systems. He explained that the data structure and update procedures will be determined consistent with the source system. Mr. Valencia said the first decision would be to determine what attribute would be used as the primary identifier.

Chairman Ruffin asked if a decision had been made on what identifier would be used for Provider. Mr. Mix said that would be determined by the identifier used in the source system and use of the common identifier would support immediate referencing back to the corresponding record in the source system. Chairman Ruffin asked if the primary identifier would be an “opaque” identifier for both the Person and the Provider hubs. Mr. Mix said this would vary by system but each record would be assigned a system-generated unique identifier. Mr. Quinn added that the only type of truly unique identifier was one that no one needed to know, given the fact that all other identifiers suffered from the risk of human-assignment error.

Mr. Valencia said agency assigned identifiers would be linked to the record and maintained in Initiate but each record would have the system generated unique identifier. Dr. Grubbs said that the Person standard included attribute fields for the agency assigned identifier(s) and a code for the assigning entity. Mr. Valencia said agency identifiers could be used for matching purposes or stored as non-matching "Payload" data. Mr. Quinn said this was an important concern since, as an example, the Social Security Administration eventually will run out of Social Security numbers.

Mr. Valencia concluded by walking through the data extraction guide for the Provider hub, giving an overview of Initiate's "out of the box" matching and non-matching attributes. For clarification, Mr. Mix, Chairman Ruffin and other HITSAC Members distinguished for Mr. Valencia between two "agency" assigned Provider identifiers – the Unique Physician Identification Number (UPIN) and the National Provider Identifier (NPI).

Chairman Ruffin raised the question of HITSAC's scope relative to agency data systems and whether the data model for the Provider hub will require agencies to change their source systems. Mr. Quinn stated that HITSAC was establishing a "gold standard" for any subset of data coming into the system. Chairman Ruffin said HITSAC as an "advisory" committee cannot mandate anything to Commonwealth agencies, but he added HITSAC was advising agencies that collect and maintain data on providers to do so consistent with the Provider data model. Mr. Pollack suggested the proposed system would make the best use of available source data rather than impose mandatory changes for feeder systems. Dr. Harrison said that in many cases a valid match could be established with less than the "out of the box" matching attributes identified for Initiate.

Dr. Grubbs said that as with the Person hub the Provider standard will establish how the matching attributes need to be structured in order for agencies to engage with the EDM tool. Chairman Ruffin acknowledged saying that this meant that participating agencies were entering a Commonwealth Gateway. Mr. Mix said that the EDM was part of the Commonwealth Gateway and that the technology discussion was geared toward establishing this gateway.

Mr. Quinn restated that the Commonwealth was establishing the "gold standard" that participating agencies can use to match their subset. In some cases, Mr. Quinn continued, the failure to match may indicate identity theft or some other factor requiring human intervention. Chairman Ruffin agreed saying that over time the Commonwealth's development of new transaction systems would come into line with the matching criteria. Mr. Quinn stated that should be something built into Commonwealth solicitation guidelines. Dr. Grubbs said that this already is happening as the MDG Team has started receiving agency requests for input relating to data standards for inclusion in solicitation documents.

Chairman Ruffin asked Mr. Mix and Ms. Barnes to clarify what questions HITSAC will be tasked with answering for the HIT/MITA Program. Mr. Mix explained that there will be an incoming message from HIE to the EDM to query against the Provider data model, and the response from the EDM, so HITSAC will need to advise on development of the standard defining the transaction, messaging and related interoperability functions. Mr. Valencia said that specifying this will be necessary for establishing the system requirements. Dr. Grubbs said that the business requirements for HIE and EDM will drive development of the data standards. Mr. Mix said data usage will be important to consider, particularly what data will be available for external usage versus internal matching.

Dr. Harrison added that HITSAC will play a role in how the data definitions become expressed via the data standard for each matching attribute. Chairman Ruffin cited as an example the primary address field. He asked Mr. Valencia what would be the recommended format for the address field, and Mr. Valencia said there were many formats but that he would leave it up to the Commonwealth to define. Dr. Harrison said the most

important thing is to establish a standard rather than leaving it open to the wide range of formats in the source data systems.

Dr. Cook asked what types of data would be made public versus maintained strictly for internal matching. Chairman Ruffin said that the intention was not to make data any “more public” than the current state, and Mr. Mix said the role of the Initiate platform in the Commonwealth’s context would be for internal matching and not public consumption. Dr. Cook also questioned whether the data would be validated before loading it into Initiate, particularly the address information. Dr. Grubbs confirmed that VITA staff was exploring an address validation tool. Todd Kissam, Enterprise Architect with VITA, provided information on the validation tool currently under examination.

Chairman Ruffin concluded the session on the Provider hub by stating that many questions would need to be addressed and case studies examined in the coming months as the Commonwealth prepared for implementation. He added that it appeared as though Initiate provide the flexibility needed to accommodate a wide range of applications and services.

Mr. Valencia moved onto the (Healthcare) Organization hub. Dr. Grubbs distinguished between the Healthcare Organization and General Organization hubs. Chairman Ruffin said that General Organization was equally important, since the EDM tool will be the Commonwealth’s gateway for data access. Mr. Valencia concentrated the discussion on matching versus non-matching criteria.

Chairman Ruffin requested clarification on the “Organization Specialty” attribute in the Healthcare Organization hub. Mr. Valencia said he would check into the definition of this attribute. Mr. Quinn said he expected specialty codes had been established within each health discipline and recommended reviewing the Systematized Nomenclature of Medicine--Clinical Terms (SNOMED) for more information. Chairman Ruffin responded that this would need to be addressed as part of the system requirements. Mr. Quinn said he would ask specialists in HL7. Dr. Harrison said it would be important that the system requirements establish consistency over time in the terminology, codes and locations within the Commonwealth.

Chairman Ruffin stated these data would need to be defined in the Organization hub. Mr. Quinn asked Dr. Harrison if there were codes for professional specialties. Dr. Harrison said he would investigate. Chairman Ruffin asked Mr. Valencia if he could ask other IBM specialists in the healthcare domain if they knew of detailed organizational and professional specialty codes. Dr. Grubbs asked Mr. Valencia if for General Organization Initiate used North American Industry Classification System (NAICS) or Standard Industrial Classification (SIC) coding systems. Mr. Valencia said the General Organization solution was still under development.

Chairman Ruffin asked Mr. Mix how DMAS currently handles queries for provider specialization, i.e., text queries. Mr. Mix said the DMAS system does not go into that level of detail on specialization; it mainly would be on name search. Mr. Quinn compared it to the Yellow Pages and a search by professional specialization based on general terminology and index domain.

Mr. Valencia identified the “Organization Type” attribute. Chairman Ruffin asked the difference between the “Organization Specialty” and “Organization Type” attributes. Mr. Mix said that DMAS has attributes for “types” and “specialties,” i.e., a dentist “type” with a particular “specialty.” Dr. Cook asked if the “Organization Type” attribute referred to for-profit versus non-profit. Mr. Valencia said he would investigate, adding that the Commonwealth could decide on its own codes then build these codes into the system parameters.

Chairman Ruffin asked Mr. Valencia to confirm that the matching algorithms featured a weighting for the matching attributes, as well as which attribute received the highest weight value. Mr. Valencia verified that the

matching algorithms did use weights for the attributes; as for the highest weighted, Mr. Valencia said the highest weighted attributes tended to be the identifiers.

Mr. Mix said that the array of information available in the system for Healthcare Organization would help the Commonwealth's long-term care providers and social workers in patient placement. He said having the range of information regarding which provider is accepting new patients, payers accepted and related data in one location would add value for these agencies. Dr. Grubbs said these data would fall into the type of core non-matching attributes that could be maintained in the EDM tool.

Dr. Harrison asked about the specification of the "Pharmacy" attribute field in the Organization hub. Mr. Valencia said it would not be used for matching purposes. Dr. Harrison said HITSAC should look closely at each of the attributes and make recommendations on what should be included in the system.

Mr. Valencia wrapped up the presentation. Chairman Ruffin asked about the largest implementation of Initiate based on the population. Mr. Valencia said Canada was the largest population in which Initiate had been implemented. Chairman Ruffin followed with whether Canada's implementation included Provider and Organization. Mr. Valencia said some areas had implemented Provider, but not Organization, and that all areas had implemented Patient (Person). Chairman Ruffin asked if HITSAC could have access to Canada's information. Mr. Valencia said that would be possible, and the IBM team would explore the use-case. Mr. Quinn indicated that Canada was very active in HL7 and he would request detailed information.

Chairman Ruffin asked for use-cases at the state level, and Mr. Valencia said North Dakota and Maryland offered the best use-cases for the Person hub. Chairman Ruffin opened the discussion for other use-cases. Mr. Valencia recommended Sutter Health. Chairman Ruffin said Sutter would be an excellent use-case. Mr. Quinn recommended UPMC, and this entity was added to the list. The final list of use-cases: Canada, Maryland, Sutter Health and UPMC. Chairman Ruffin tasked Dr. Grubbs and the MDG Team to work with IBM to compile details on each use-case, offering to assist the MDG Team as needed to make contact with the appropriate sources.

Dr. Harrison asked Mr. Valencia about assessments of auto-links (automatic matches) versus ones requiring human review. Mr. Valencia said he did not have metrics to quantify the performance rate but that Initiate featured analytic tools to monitor performance of the matching algorithms. Dr. Harrison said he was interested in this type of performance information as a benchmark to evaluate the Commonwealth's forthcoming system and to project work-load requirements for the manual-review tasks.

Mr. Pollack said the best error rate reported in the literature would be between an 8% to 10% level. Dr. Harrison added that to get to a lower error rate it would be important for Commonwealth agencies to "clean" their data prior to loading into Initiate. Dr. Grubbs said this would be important also when setting the thresholds for the matching categories.

Public Comment

Chairman Ruffin called for public comment. Seeing none, Dr. Ruffin closed the public comment period.

Adjourn

Chairman Ruffin opened the meeting for any final comment. Seeing none, Chairman Ruffin called for a motion to adjourn. A motion was made by Mr. Pollack with a second from Dr. Cook. The motion to adjourn passed unanimously.