Virginia Information Technologies Agency

Health Information Technology Standards Advisory Committee (HITSAC)

Annual Report 2014

Virginia Information Technology Agency

Table of Contents

HITSAC 2014 Membership

Dr. Marshall Ruffin, HITSAC Chairman, Executive Vice President and Chief Technology Officer, Inova Health Systems (July 2009-Present)	Mr. Rich Pollack, Vice President and Chief Information Officer, Virginia Commonwealth University Health System (February 2011-Present)
Dr. Sallie S. Cook, Chief Medical Officer, VHQC (May 2011-Present)	Mr. John Quinn, Chief Technology Officer Health Level 7 (August 2009-Present)
Dr. James H. Harrison, Associate Professor and Director of Clinical Informatics, Departments of Public Health Sciences and Pathology, University of Virginia (May 2011-Present)	

HITSAC Staff Administrators

Ms. Nicole Helmantoler (February 2014 – Present)	Ms. Farnoosh Marian (August 2014 – Present)

HITSAC
Health Information Technology Standards Advisory Committee

Executive Summary
The Health Information Technology Standards Advisory Committee (HITSAC) serves as an advisory body to the Information Technology Advisory Committee (ITAC) with statutory authority pursuant to § 2.2-2699.7. HITSAC, consisting of five members appointed by ITAC, advises ITAC, the Chief Information Officer (CIO) of the Commonwealth, and the Secretaries of Technology and Health & Human Resources on the utilization of nationally recognized technical and data standards for health IT systems or software.

2014 Accomplishments
Much work has been accomplished through HITSAC this past year. During 2014, HITSAC established priorities for health care and offered guidance on the following:

- HITSAC established the Genomics Working Group (GWG) to investigate requirements for health information technology (IT) standards to support personalized medicine, clinical genomics, genetic research and related bioinformatics.

- HITSAC analyzed data standards to promote citizen electronic access to medical records. To that end, the Fast Healthcare Interoperability Resources (FHIR)® Standard is being actively monitored as an Open API Standard to enable patients and providers to share data with designated, trusted apps.

- HITSAC continued to advise the Commonwealth on their implementation of data governance models and bodies, as envisioned in the Enterprise Information Architecture (EIA) Strategy. The Commonwealth Data Stewards Group (DSG) has become operational and continues to provide progress updates to HITSAC.

- HITSAC continued to advise the Commonwealth on data sharing models and trust frameworks. HITSAC formed a relationship with the Enhanced Memorandum of Understanding (e-MOU) Coordinating Committee to monitor progress in the data sharing effort across the Health and Human Resources Secretariat (HHR).

2015 Planned Priorities
HITSAC is planning to explore the following potential work streams for the coming year:

- Standards for exchange of personalized and precision medicine
- Standards to promote citizen electronic access to medical records
- Standards to support quality measures, payment reform, and HIT innovation
- Expansion of Medicaid IT Architecture (MITA) "Government Gateway" architecture to agencies outside of HHR

Legislative History, Statutory Authority and Prior Contributions

In 2009, the General Assembly enacted legislation creating the Health Information Technology Standards Advisory Committee (HITSAC) as an advisory committee to the Information Technology Investment Board (ITIB). HITSAC has statutory authority codified under § 2.2-2458.1, *Code of Virginia.*

Upon dissolution of ITIB in 2010, HITSAC was restructured to serve as an advisory body to the Information Technology Advisory Council (ITAC) with statutory authority pursuant to §2.2-2699.7, *Code of Virginia*.

HITSAC consists of five members appointed by ITAC (see *Appendix A* for member profiles) and is tasked with advising on nationally recognized technical and data standards for health IT systems or software for state agencies, including:

Since its formation, HITSAC has advised ITAC, the CIO of the Commonwealth, and the Secretaries of Health and Human Resources and Technology on the adoption of 127 national and international health IT standards. A full report of the adopted health IT standards can be found [here](#).

- Vocabulary, messaging, data, data exchange and related standards
- Data governance between health IT and the other domains of state government
- Use of the statewide Health Information Exchange (HIE),
- Data requirements and standards for patient health and public health research
- Semantic interoperability and shared vocabulary

Notable contributions to date are cited in *Figure 1: HITSAC Timeline of Contributions.*
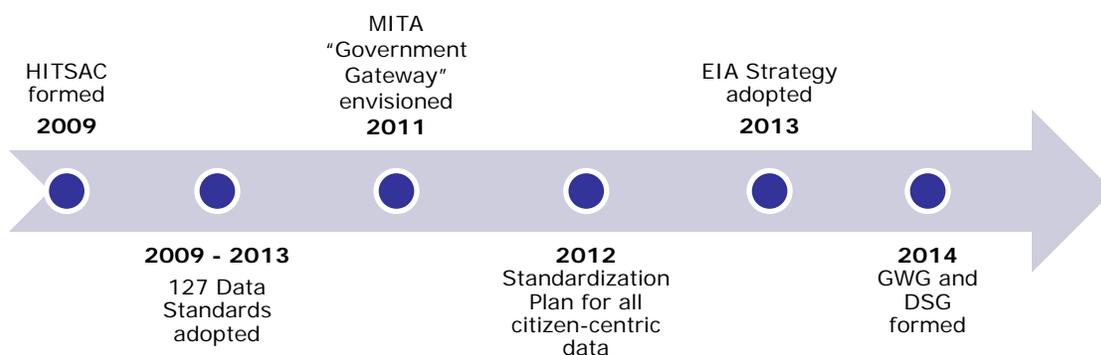

Figure 1: HITSAC Timeline of Contributions.

HITSAC is administered by Virginia Information Technologies Agency's (VITA) Commonwealth Data Governance team. The [HITSAC Charter](#), last updated in 2013, highlights the committee's guiding principles and statutory authority.

HITSAC

Health Information Technology Standards Advisory Committee

2014 Accomplishments

HITSAC's prior year accomplishments continue to be framed around three primary focus areas:

(1) health IT interoperability,

(2) enterprise information architecture and governance, and

(3) health information exchange.

HITSAC recognizes that there is overlap among health IT interoperability, architecture and information exchange, as depicted in *Figure 2: Focus Area Relationships*. Many of the standards adopted to date support more than one of the focus areas.
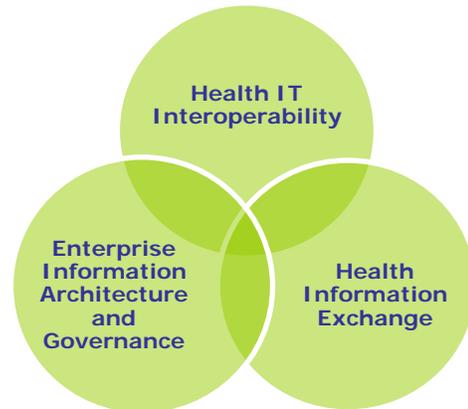

Figure 1: Focus Area Relationships.

Health IT Interoperability

HITSAC Genomics Working Group

In 2013, Ms. Mollie H. Ullman-Cullere, Co-Chair of Health Level 7 (HL7) Clinical Genomics Workgroup from Health Level Seven International, presented recent advances, use cases and applicable health IT standards in genomics and personalized medicine. Ms. Ullman-Cullere indicated a need for standards development harmonization across stakeholder groups working in genomics, adding that the Commonwealth of Virginia and HITSAC comprise one of the most diverse groups she has encountered.

Based on this need, the Genomics Working Group (GWG) was established to investigate requirements within the Commonwealth for health IT standards to support personalized medicine, clinical genomics, genetic research and related bioinformatics. The GWG, composed of distinguished members from the Centers for Disease Control & Prevention (CDC), Division of Consolidated Laboratory Services, HL7 Clinical Genomics Working Group, ConnectVirginia HIE, Inc., Virginia Department of Health, Virginia Commonwealth University, and the University of Virginia, evaluated numerous use cases over a three month period.

Using adopted standards as its basis, the GWG developed two use cases showing immediate feasibility for operational specification and implementation as well as recommending for adoption health IT standards and implementation guides.

Two use cases promised the most immediate feasibility for operational specification and implementation:

- **Use Case #1 – Process for Implementing a Clinical-Grade Variant File within the Healtheway eHealth Exchange.** This use case supports the clinical-grade variant file implementation currently under development by the CDC through the nationwide eHealth Exchange. The CDC file specification will be implemented in the HIE for public health and clinical (query and retrieval) purposes. If approved, transmittals based on the file specification will contain reference data from a certified compliant laboratory via the Clinical Laboratory Improvement Amendments of 1988 (CLIA) regulations.

- **Use Case #2 – Process for Integrating Results from Pharmacogenomic Testing across EHR Systems.** This use case supports pharmacogenomics testing integration results across EHR systems. The Inova Health System/ITMI EHR (Epic) and the Virginia Commonwealth University EHR (Cerner) systems are the use case candidates. If approved, data transmittal will leverage existing infrastructure operated by ConnectVirginia HIE and MedVirginia HIE.

In addition to the use cases, the GWG recommended adopting health IT standards and implementation guides in clinical genomics as Commonwealth standards and implementation guides. These included:

- CLIA - Public Law 100-578. The CLIA standards cover all laboratory testing (except research) performed on humans in the United States.
- Health Level 7 (HL7) Implementation Guide for CDA Release 2: Genetic Testing Reports, Release 1
- HL7 Version 2 Implementation Guide: Clinical Genomics; fully LOINC-Qualified Cytogenetic Model, Release 1 (US Realm)
- HL7 Version 2 Implementation Guide: Clinical Genomics, fully LOINC-Qualified Genetic Variation Model (US Realm)

Standards to Support Citizen Access to Medical Records

A central challenge for health care standards is how to handle the variability caused by diverse and evolving health care processes. In 2014, HITSAC analyzed available data standards and frameworks to promote citizen electronic access to medical records independent of any system interoperability constraints. Fast Healthcare Interoperability Resources (FHIR)® is an open standard, in development by HL7, for exchanging and sharing health care information electronically. FHIR permits electronic health records to be available, discoverable, and understandable, allowing citizens to potentially share their medical information with their providers. The FHIR framework was built specifically to address the variability and diversity in health care processes and systems. HITSAC monitored the trial use standard in 2014, and will consider it for adoption in 2015 upon release by HL7.

In order for citizens to share their medical information with providers, an additional standard is needed to support queries against health care provider information that may be in various formats and widely defined. The Commonwealth has identified a need to standardize provider information and make that information available to both state agencies and citizens. In 2014, HITSAC endorsed an effort led by the Department of Aging and Rehabilitative Services (DARS) to broaden the definition of a provider and to identify data standards for home and community based services.

Enterprise Information Architecture and Governance

Commonwealth Data Stewards Group

HITSAC continued to advise the Commonwealth on their implementation of data governance models and bodies. In 2013, HITSAC endorsed the creation of the Commonwealth Data Stewards Group (DSG), the enterprise-level data governance body envisioned under Goal 1 of the *Commonwealth Enterprise Information Architecture (EIA) Strategy*.

Since becoming operational, the DSG functions as three distinct bodies: the Executive group, the Functional/Policy working group, and the Technical working group. The Executive

group will be responsible for providing strategic planning, policy and executive-level guidance on data governance, information sharing and data standardization. The Functional/Policy working group will drive efforts for cross-agency information exchange, enterprise data sharing agreements, agency-level EIA strategies and business-driven training plans for data stewards. The Technical working group informs on strategies for data quality, data security, enterprise data models, metadata tools and registries and analytics.

In 2014, the Executive group tasked the Functional group with identifying the enterprise-wide legal considerations for data sharing, including identifying ways in which health data could be shared with other agencies. The Technical group was tasked with identifying the requirements for an Enterprise Data Asset Inventory and Taxonomy, which would enable data sharing of health data across secretariats.

Data Sharing Governance

HITSAC continued to advise the Commonwealth on data sharing models and trust frameworks. HITSAC revisited trust framework components included in the Data Use and Reciprocal Support Agreement (DURSA) and was introduced to the Enhanced Memorandum of Understanding (e-MOU) data sharing framework utilized by the HHR secretariat. The e-MOU is intended to offer an opportunity to increase efficiency, effectiveness, and interoperability of HHR agencies and programs as well as eliminate duplicate point-to-point agreements.

> *HITSAC formed a relationship with the Enhanced Memorandum of Understanding (e-MOU) Coordinating Committee to monitor progress in the data sharing effort across HHR.*

The e-MOU is governed by a Coordinating Committee. HITSAC, in 2014, formed a relationship with the Coordinating Committee to monitor progress in the data sharing effort across HHR. The Coordinating Committee relies on HITSAC to define the Commonwealth's data exchange standards and will become a mechanism for building adoption of those standards. HITSAC formalized its relationship with the e-MOU Coordinating Committee by requesting that a status report be provided to HITSAC at public meetings.

Data Standards and Compliance Monitoring Process

HITSAC continued to work with VITA to refine the process for data standards approval and compliance monitoring as part of Item 427. Item 427 of the 2012 and 2013 Appropriation Acts set the requirements for data standardization across the Commonwealth. In 2014, HITSAC monitored the approval process for the new Virginia Geographic Information Network (VGIN) geospatial data/map layer standards as well as the modification process for the existing Vendor Data Standard.

The first full year of data standards compliance monitoring was achieved in 2014. As part of this process, 60 active major IT investments were reviewed and analyzed regarding compliance status. HITSAC provided guidance on refinements to the compliance monitoring process and offered suggestions on exception criteria.

Health Information Exchange

Health Information Exchange (HIE)

Since the conclusion of the initial grant funding in February 2014, a new organization home for statewide interoperability initiatives has been established. ConnectVirginia HIE, Inc. is chaired by Secretary of Health and Human Resources William Hazel, MD, and includes members of HITSAC. Chairman Ruffin serves as Vice-Chair and Dr. Sallie Cook is a member.

HITSAC provided input in 2014 on ConnectVirginia's sustainability plan as well as implementation guidance for participants.

To date, the Commonwealth's HIE provides the following services:

- A Public Health Reporting Pathway, with the majority of health systems now using the utility for the reporting of immunizations, syndromic surveillance and reportable labs.
- A cost-effective approach for query-based exchange in collaboration eHealth Exchange and HealtheWay. ConnectVirginia maintains state-level trust agreements while individual "nodes" test and onboard directly to eHealth Exchange.
- A clinical encounter alerts (EA) pilot, implemented in northern Virginia, allowing practices and a private ACO care management program to receive real-time alerts when patients have been admitted or discharged from an inpatient facility or emergency department.
- An expansion effort to participate in the statewide VLER Health Information Exchange program as a key component of Virginia's support to its 800,000 veterans.

2015 Planned Priorities

HITSAC will explore the following potential work streams for 2015:

Standards for exchange of personalized and precision medicine

Building upon the analysis of the GWG, HITSAC will investigate standards to support genomic data collection for pharmacogenomics and cancer research. Emphasis will be placed on developing and/or identifying biotech industry standards as they relate to personalized medicine and precision medicine. This work supports the Governor's strategic vision to promote the growth of biotechnology companies in the Commonwealth.

Standards to promote patient electronic access to medical records

HITSAC will explore standards to support the concept of a Statewide Provider Directory, which would serve as the integrated, accurate, and trusted source of Virginia providers and affiliated data. HITSAC will monitor the development of the Federated Healthcare Provider Directory (HPD) standard and determine its applicability for the Commonwealth.

As HL7 FHIR Standard moves from trial use to normative use, HITSAC will continue to monitor its application in the Commonwealth and adopt the necessary standards.

Standards for quality measures, payment reform, and HIT

In 2014, the Commonwealth was awarded a State Innovation Model (SIM) grant as part of the Centers for Medicare and Medicaid Services (CMS) Round 2 Model Design. The SIM grant provides financial and technical support to states for the development and testing of state-led, multi-payer health care payment and service delivery models that will: improve health system performance, increase quality of care, and decrease costs for Medicare, Medicaid and CHIP beneficiaries— and for all residents of participating states. HITSAC was invited to provide guidance on standards relating to quality measures, payment reform, and Health IT.

Expansion of "Government Gateway" architecture

Since 2011, HITSAC has been actively involved in creating standards for the "Government Gateway" for information exchange between state agencies and between state agencies and citizens of the Commonwealth. The MITA shared services portfolio, currently in use by HHR agencies, provides a reusable platform for authentication and information exchange. As a goal in 2015, HITSAC will work with HHR leadership on the plan to expand the shared services to other secretariats in the Commonwealth.

Appendix A: HITSAC Members

HITSAC Chairman – Dr. Marshall Ruffin

Dr. Ruffin is a physician specializing in general internal medicine and informatics. He leads Inova Technology Services, which include IT and communications, medical records, clinical engineering, informatics, analytics, telemedicine and the program management office of Inova. Dr. Ruffin obtained his BA from The University of Virginia and his MD from Harvard Medical School, as well as an MPH in epidemiology from the University of North Carolina and MBA from the Graduate School of Business, Stanford University.

Dr. Ruffin's serves the Commonwealth of Virginia as the chairman of the Health Information Technology Standards Advisory Committee (HITSAC), which advises the secretary of technology and secretary of health and human resources, and the vice-chairman of the state-wide ConnectVirginia health information exchange. Dr. Ruffin is a distinguished fellow in the American College of Physician Executives. Before joining Inova, Dr. Ruffin worked as chief technology officer for the University of Virginia Health System.

Dr. Marshall Ruffin, HITSAC Chairman, Executive Vice President and Chief Technology Officer, Inova Health System
(July 2009-Present)

HITSAC Board Member – Mr. Rich Pollack

Rich Pollack is Vice President and Chief Information Officer for VCU Health System. There, his responsibilities include setting the vision for IT, supported by effective strategic and tactical plans that define the best practices in support of patient care and operational excellence.
Rich has more than 30 years of health care management experience.
Rich holds a master's degree in medical biology and is a member of several professional organizations.

At VCU Health Systems, his accomplishments include:
* Ongoing successful installation of electronic medical records and computerized physician order entry
* Selection and initiation of a new hospital billing system and enterprise resource planning system
* Contributing to the development of a new all digital 15 story acute care tower utilizing layers of integrated technology, including wireless, VoIP phones, bedside device integration, mobile access to facilitate effective communication and high-quality care

Mr. Rich Pollack,
MS, CHPHIMS, FHIMSS
Vice President and Chief Information Officer, Virginia Commonwealth University Health System
(February 2011-Present)

HITSAC Board Member – Dr. Sallie S. Cook

Sallie S. Cook, MD, serves as corporate medical officer and senior clinical advisor for quality improvement initiatives, review activities and other related VHQC functions, including the Virginia Health Information Technology (VHIT) Regional Extension Center. Dr. Cook joined the VHQC in 1990 after serving as a member of the medical staff and Medical Director of the Blood Bank at Virginia Commonwealth University Health System's Medical College of Virginia (MCV) Hospitals.

A Phi Beta Kappa graduate from Westhampton College of the University of Richmond, Dr. Cook received a B.S. in Biology. She earned her M.D. from the Medical College of Virginia (MCV), where she also served a residency in anatomic and clinical pathology. She joined the faculty of the VCU/MCV Department of Clinical Pathology after completing a fellowship in immunohematology. She is board certified in anatomic and clinical pathology and the subspecialty of blood banking. Dr. Cook is an Associate Clinical Professor of Pathology in the VCU/MCV School of Medicine. Currently, she is also the chairman of the board of directors for Virginia Blood Services, central Virginia's regional blood center and serves as a board member for Centralized Credentials Verifications Services, a Virginia health care provider credentialing service. Dr. Cook has also recently been named to the Virginia Lawyers Media 2011 list of "Influential Women of Virginia."

Dr. Sallie S. Cook,
Chief Medical Officer,
VHQC
(May 2011-Present)

HITSAC

Health Information Technology Standards Advisory Committee

HITSAC Board Member – Dr. James H. Harrison

James H. Harrison, Jr., MD, PhD, is Associate Professor of Public Health Sciences and Pathology at the University of Virginia School of Medicine, Director of the Division of Biomedical Informatics at UVA, and Director of Cancer Informatics in the UVA Cancer Center. He is also a board-certified pathologist and an Associate Director of Clinical Chemistry in the Department of Pathology. Dr. Harrison teaches graduate courses in medical informatics and computer programming, and co-directs the collaborative PhD training program in systems engineering and medical informatics at UVA in partnership with the Department of Systems and Information Engineering in the School of Engineering and Applied Science.

Dr. Harrison is an active member of the HL7 and IHE medical data standards organizations, chairs the IT Standards and External Affairs Workgroup of the College of American Pathologists, was a funded participant in the Cancer Biomedical Informatics Grid for 5 years, and has received research funding for development of intelligent user interfaces for the electronic medical record. He has served on NIH review panels related to medical informatics and his research interests include data repositories, data mining, temporal abstraction for pattern detection in clinical data, and intelligent data display.

Dr. James H. Harrison,
Associate Professor and Director of Clinical Informatics, Departments of Public Health Sciences and Pathology, University of Virginia
(May 2011-Present)

HITSAC Board Member – Mr. John Quinn

John Quinn is HL7's Chief Technology Officer and a Senior Executive and thought leader at Accenture. He serves as CTO to their Health and Life Sciences Consulting Practice. John has participated in HL7 (an ANSI accredited standards development organization) since its inception 22 years ago, has participated on its board of directors for the first 19 years that HL7 has had a board and has served as the chair of its Technical (i.e. standards writing) Committee form 1990 to 2007.

John has over 33 years experience in the Healthcare Industry and 37 years experience in the computer industry. He has a strong background in the areas of healthcare information systems planning, healthcare data integration messaging and data standards, computer networks, computer architecture, operating systems and communications software. He also acts as a subject matter expert and technical quality assurance reviewer for provider and payer client engagements involving the analysis, specification, selection and implementation of systems that support administrative, billing and clinical information systems.

Mr. John Quinn,
Chief Technology Officer
Health Level 7
(August 2009-Present)

Appendix B: 2014 Presentations

Several presentations were given in HITSAC meetings. The following is a compilation and brief synopses of them:

Enterprise Data Management – Feb. 2014

Ms. Carrie McDermott, EDM Specialist at VITA, gave a presentation on Enterprise Data Management. EDM went into Production in 2013. The Virginia Department of Motor Vehicles (DMV) was the current customer within the IBM Initiate platform. The value proposition of using EDM was increased accuracy, greater reuse, greater agility, cost reduction, and automated services.

Common data sharing challenges included the need for agency business processes to change to support using data from other agencies. Moving forward, EDM wanted growth and new customers.

Commonwealth Data Governance (CDG) conducted a survey of commonwealth data stewards and based on their responses to the survey, it was reported that 14 out of 32 think that data sharing is highest priority for agencies; 10 out of 32 think that Master Data Management is the solution that will best fit their agency data sharing and data governance efforts.

Ms. McDermott said that HITSAC could help EDM by promoting the EDM message to improve data quality, reduce cost with reuse and greater agility.

ConnectVirginia Update and Relevance of EHR/HIE Working Group – Feb. 2014

Ms. Sandy McCleaf, Executive Director, ConnectVirginia, gave a presentation on ConnectVirginia Update and Relevance of EHR/HIE Working Group. The basic ConnectVirginia services for public health reporting and third party Health Information Systems Program (HISP) was presented. ConnectVirginia entered a 30-month 'bridge' funding period for sustainability. The 'bridge' funding period was to run from February 2014 through August 2016 based on the approved sustainability framework.

ConnectVirginia was working on establishing an Electronic Health Record (EHR) and Health Information Exchange (HIE) interoperability workgroup. The goal of the EHR - HIE Interoperability Workgroup was to create an integrated marketplace of EHR capabilities in which the interfaces between EHRs and HIEs are consistent across multiple states. The workgroup developed a set of specifications to allow "out-of-the-box" EHR connectivity, to simplify and align the process of EHR and HIE development.

Dr. Joseph Grubbs, Data Governance Contractor, VITA, gave a presentation on the 2013 HITSAC Annual Report to include everything that HITSAC has done since its inception. The Annual Report was a direct outcome of conversations between the Chief Information Office (CIO) for the Commonwealth of Virginia and HITSAC Chairman, Dr. Ruffin. HITSAC was created in 2009 and codified under § 2.2-2458.1, Code of Virginia and was established to advise Virginia's IT Investment Board (ITIB). When ITIB was dissolved, HITSAC was moved under the IT Advisory Council (ITAC), the CIO and the Secretary of Technology in 2010. The current statutory authority for HITSAC is codified under § 2.2-2699.7, Code of Virginia. HITSAC advises ITAC, and in turn the CIO of the Commonwealth and the Secretaries of Technology and Health & Human Resources.

To date, HITSAC has made recommendations for adoption of 125 health IT standards. Some of the major accomplishments for HITSAC include health IT interoperability, health information exchanges, enterprise architecture, governance, and the commonwealth government gateway.

Major milestones included the first review of the ConnectVirginia implementation guide standard and onboarding experience for the first node – Inova, the commonwealth EIA strategy and EIA domain report requirements, NIEM core person data exchange standard, emerging trends in health IT standards and interoperability, including genomics, genetic research and personalized medicine, and the amendments to the HITSAC charter.

HITSAC priorities included establishing a genomics and bioinformatics working group, developing the commonwealth EIA domain report, the Enterprise Data Management (EDM) Organization data exchange standard, a compliance monitoring strategy for data standards, the ConnectVirginia implementation guide (IG) standard and ensuring that the commonwealth stays current on all the national and international health IT standards.

Cross-Sector Digital Identity Initiative Status Update – April 2014

Mr. Farnsworth and Dr. Grubbs co-presented the CSDII update. The CSDII pilot project was described, headed by Virginia's DMV, the American Association of Motor Vehicle Administrators (AAMVA), Microsoft, CA Technologies and other participants. CSDII provides a secure, privacy enhanced solution for electronic authentication and identity management. CSDII will support the use of commercial credentials within CAS and the non-Commonwealth citizen access through CAS to online state services.

Current status of CSDII included recent outreach in the health policy and IT domain, the process of onboarding Inova Health System as the first CSDII Relying Party and the more than 20 prospective Relying Party candidates in the onboarding pipeline. Potential candidates include entities in the state government (State of Georgia), higher education, banking and online gaming communities.

CSDII engaged with other stakeholders in the identity ecosystem. This featured outreach to the e-ID Working Group, participation in the Identity Ecosystem Steering Group (IDESG), and various IDESG committees (healthcare, privacy and trust frameworks), and collaboration with Georgia Tech Research Institute on machine-readable trust marks for CSDII components.

Carequality: An EHR-Neutral Approach to E-Health Exchange – April 2014

Mariann Yeager, Executive Director of Healtheway, gave a presentation on Carequality. She highlighted the Healtheway organization, its mission and organizational structure. She described eHealth Exchange, which was formerly the Nationwide Health Information Network (NHIN) before being moved from the Office of the National Coordinator for Health IT to Healtheway, and provided a status update on the Exchange. With Connections coming online in 2014 eHealth Exchange planned to have 1,600 hospitals, 10,000 medical groups and 100 million patients.

Healtheway's new initiative, Carequality, has been designed to create an EHR-neutral network of health information exchange comparable to the ATM/ACH network of financial institutions. The vision for Carequality is to create an "open and neutral industry collaborative that develops a nationwide interoperability framework to enable connectivity between and among networks."

Carequality has been built by a diverse group of stakeholders and leverages existing capabilities for health information exchange. Carequality has a common interoperability framework, defined roles for participants, implementers and other stakeholders, held together by an integrated trust framework. Participants include health systems, EHR vendors, payers, HIEs, IT service providers and other partners.

Healtheway maintains an implementation-driven focus for Carequality. The organization had plans to have the Carequality charter approved in May 2014, the governance mechanisms implemented in June 2014 and working groups in place by July 2014.

HITSAC-Centers for Disease Control and Prevention Working Group – April 2014

Dr. Ira Lubin, Division of Laboratory Programs, Standards and Services ("Division"), CDC, gave a presentation clinical genomics.

The Division and its areas of activity within the CDC were discussed. He then discussed the capabilities on which the Division focused its efforts. These included, external to a laboratory, quality assurance, databases and registries, informatics analysis, clinical support/reassessment and patient records for clinical genomics, specifically on patient sequence variation; within the laboratory, the Division focuses on laboratory interpretation and test result reports.

HITSAC-Centers for Disease Control and Prevention Working Group –Candidate List & Charter - April 2014

Dr. Grubbs presented the candidate list and charter. Recommended candidates were identified and Dr. Grubbs walked HITSAC through the process used to identify potential candidates. He then gave an overview of the proposed charter for the working group. Wording changes were recommended for the draft charter. The information in the working group would be made public, but limited to the working group output and not the actual results from genetic testing. The candidate list and charter were approved.

Steve Gravely of Troutman Sanders (TS), LLC, gave a presentation on Establishing Trust in Health Information Exchange: the eHealth Exchange Model. A high-level orientation to trust frameworks was presented in relation to data sharing. DURSA, the document used for the eHealth Exchange and a document which he helped author, was discussed. The issue of trust is foundational to the ability of Health Information Exchanges (HIEs) and other data sharing networks to survive, especially as there are steep penalties when there is a breach of trust. The Universal Components of Trust, which highlights five core elements of trust, were reviewed. The DURSA is a multi-party trust agreement that supports data exchange within the eHealth Exchange. Point-to-point interfaces are not sustainable, thus bringing about the DURSA as an alternative. It is a legally binding contract, requiring those who sign it to abide by its terms and conditions; there are consequences in place for not following these terms and conditions. The DURSA is a living contract and has been revised twice since its adoption. Each time it undergoes a revision, the changes must go through federal clearance. The Coordinating Committee for eHealth Exchange owns the agreement. As of August, there were 75 participants in the eHealth Exchange. By the end of the year, the number of participants was expected to rise to over 100, representing 100 million patients.

The Coordinating Committee (CC) is the governance authority of the eHealth Exchange. One of the 16 possible members of the CC is Healtheway. Healtheway is a Virginia non-profit organization that provides the infrastructure of the eHealth Exchange and holds all of the federal contracts. Mr. Gravely reviewed the responsibilities of the CC, its main responsibility being oversight of the eHealth Exchange.

The Enhanced Memorandum of Understanding (e-MOU) – Aug. 2014

Belinda Willis from the eHHR Program Management Office talked about the Enhanced Memorandum of Understanding (e-MOU). A high-level summary of the e-MOU process was discussed. Her presentation covered what the e-MOU is and what it is not, the purpose of the e-MOU and how it relates to HIPAA requirements, how it interfaces with HITSAC and VITA, how it is organized and how it works.

Based on the DURSA, the e-MOU is a single process for sharing data securely under a reasonable secure agreement that is sustainable. It is broad enough to encompass the needs of multiple stakeholders, which as of now include all of the agencies within the HHR Secretariat. The e-MOU creates partnership, synergy and transparency across agencies. The CC are the agency heads or their proxies.

The benefits of the e-MOU include eliminating multiple point-to-point MOUs. The e-MOU is not designed to require new laws as it is designed to work with applicable law. It is also designed to work under HIPAA requirements. The e-MOU was compared to the DURSA, the document from which it was based. The e-MOU is still in its infancy, so continued guidance from HITSAC was requested as the e-MOU matures. The main e-MOU includes 19 sections, defining the reusable framework and administration of the eHHR data exchange. In addition to the main e-MOU, six appendixes provide specific process detail. The presentation concluded with a brief summary of how the e-MOU works and key terms.

Home and Community-Based Services (HCBS) Taxonomy, Data Model and Potential Health IT Standards – Aug. 2014

Mr. Ernie Steidle from the Department of Aging and Rehabilitative Services (DARS) presented HCBS services and the data model for them. DARS had been working on developing standards for HCBS and the potential for exchanging services using HIE. Why does DARS care about the exchange of health information? The e-MOU is very important to DARS because it models the types of relationships that could be brokered among DARS's many partners. DARS came up with a set of business goals they believe made sense for the inclusion of HCBS as a participant in the HIE. These business goals were reviewed in addition to mentioning HCBS data standards.

Ms. Kathleen Vaughan spoke about challenges of multiple entry points into HCBS. Multiple entry points confuse individuals seeking services. As a result, people fall through the cracks between the referral point and actually accessing the service. Additionally, information is duplicated by providers as there is no way to share information already shared with one provider. There is also no community network to assess what kind of support the individual will receive. The Commonwealth emphasized the importance of HCBS. Part of that process has been the development of the Uniform Assessment Instrument (UAI). An overview of the UAI's history was given and a few of its uses were explained.

Ms. Katie Roeper presented on HCBS service taxonomies and referral transactions. Once the needs of the patient are recognized, there must be a determination of who provides that support. A problem relates to taxonomies – services may mean different things to different people. There are four taxonomies that play a role: 211 Virginia, VirginiaNavigator, HCBS for Medicaid waivers and Health Care Provider for Medicaid billing, the latter two being federal standards. The attributes of 211 Virginia were described and VirginiaNavigator, the former of which looks to families and children in the community and focuses on immediate community needs. VirginiaNavigator, on the other hand, looks at the long-term needs of the community. DARS is attempting to align these two taxonomies.

Fast Healthcare Interoperability Resources (FHIR) Update –Aug. 2014

John Quinn of HL7 gave a brief presentation on FHIR. The history of FHIR was discussed. FHIR is an open standard that can be downloaded and modified. If republished, it cannot be called FHIR because it is a registered trademark. Version 2 of HL7 was passed 25 years ago. It is old and limited by its own rules, so the content of Version 2 of HL7 will be transferred to FHIR.

HHR Enhanced Memorandum of Understanding (E-MOU) Coordinating Committee/HITSAC Relationship – Oct. 2014

Belinda Willis from the eHHR Program Management presented to HITSAC. The E-MOU Coordinating Committee (CC) convened in August, during which members elected officers and set a calendar with regular, recurring meetings to sustain progress. Ms. Helmantoler will attend CC meetings as a HITSAC (CDG) representative and advise CC on HITSAC efforts. Conversely, CC leadership will attend HITSAC and brief HITSAC when necessary.

Discussion of Genomics Working Group Use Cases – Oct. 2014

Dr. Joseph Grubbs, HITSAC Genomics Working Group (GWG) Research Coordinator, presented the Use Cases developed by the GWG. Use Case #1: Process for Implementing a Clinical-Grade Variant File for Reporting to the Virginia Cancer Registry (VDH) and Integrating into an Electronic Health Record through eHealth Exchange, leverages CDC work, specifically by Dr. Ira Lubin's group, on a clinical-grade variant file. The purpose of this use case is to establish a process for implementing the CDC's clinical-grade variant file for the purpose of (a) reporting genomic information to the Virginia Cancer Registry (VDH), using ConnectVirginia's Public Health Reporting Pathway, and (b) integrating into an electronic health record through the eHealth Exchange.

Use Case #2: Process for Transmitting Results from Pharmacogenomic Testing across Electronic Health Record Systems, leverages the work done by Aaron Black's group (ITMI). The purpose of the pharmacogenomics use case is to establish a process for transmitting results from ITMI's Plavix Genotype Test from Inova's Epic EHR system to VCU's Cerner EHR system via ConnectVirginia and MedVirginia.

Chairman Ruffin requested a motion to accept Use Case 1 as defined by the GWG. A motion was made by Mr. Pollack and seconded by Dr. Cook. The request was unanimously approved.

Chairman Ruffin requested a motion to accept Use Case 2 as defined by the GWG. A motion was made by Dr. Cook and seconded by Dr. Harrison. The request was unanimously approved.

Dr. Grubbs reviewed the recommended health IT standards and implementation guides that GWG looked to in establishing these use cases. Although these standards have been adopted by the Commonwealth, GWG seeks to be transparent regarding the standards used in developing the use cases. In addition to recognizing these standards, GWG requested HITSAC endorsement of three HL7 implementation guides. Adoption would not preclude the potential adoption of HL7 v3 standards. Chairman Ruffin requested a motion to recommend to ITAC, the CIO of the Commonwealth and the Secretaries of Technology and Health and Human Resources the adoption of the CLIA Regulations and the three referenced HL7 Implementation Guides as Commonwealth IT Resource Management (ITRM) standards. The motion was made and seconded by members of HITSAC and the request was unanimously approved.

Chairman Ruffin requested a motion to accept this presentation as the final report from the Genomics Working Group and move to dissolve the group as a public body. The motion was made and seconded by members of HITSAC and the request was unanimously approved.

Chairman Ruffin, HITSAC Chairman, Executive Vice-President and Chief Technology Officer of Inova Health System, gave a presentation on Enterprise Architecture for Healthcare Organizations. Chairman Ruffin's topic of discussion centered on imaging and its growing popularity. Inova Health Systems has been studying the architecture developed by Cleveland Clinic, where primary images are maintained in the source system and moved to a vendor neutral archive where they are accessible, all while maintaining DICOM standards. This process would not only save money, but improve quality of care by having the images available through EMRs. Chairman Ruffin asked HITSAC members for input regarding this topic.