December 22, 2009

MEMORANDUM

TO: The Honorable Timothy M. Kaine
             Governor of Virginia

             The General Assembly of Virginia

FROM: Marilyn B. Tavenner, Secretary of Health and Human Resources
             Leonard M. Pomata, Secretary of Technology

SUBJECT: Annual report of the Advisory Committee on Electronic Health Records

I am pleased to submit the Annual Report of the Advisory Committee on Electronic Health
Records prepared pursuant to Item 297 O. of the 2009 Appropriation Act.

If you have questions or need additional information concerning this report, please contact me.

MT/kb

Health Information Technology in Virginia

2009 Report to the Virginia General Assembly

Office of the Secretary of Health and Human Resources and Office of the Secretary of Technology

December 22, 2009

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Executive Summary

The collaborative efforts between the Health and Human Resources and Technology secretariats, have resulted in significant achievements in the area of health information technology. Through the support of the Virginia General Assembly, and Governor Tim Kaine, the Commonwealth has been able to leverage federal funding to supplement some of the Commonwealth's most innovative and cutting edge technology initiatives.

This report will highlight the significant health information technology achievements that were accomplished throughout 2009. Virginia continues to mobilize the appropriate partners in working towards common solutions that will enhance the ability for all providers in the health care spectrum to offer comprehensive care. In addition to the benefits for health care providers, the citizens of the Commonwealth experience a more holistic and cost effective approach to their care.

Introduction

The Commonwealth of Virginia has seen much activity in the Information Technology (IT) Health arena throughout 2009. Across the Commonwealth, multiple new programs have been implemented in our health and human resources agencies. We have been able to gather both public and private sector health entities to begin working towards an administrative data exchange process, called the Health Information Exchange (HIE). This project will become active in January, 2010. Additionally, we have created and begun staffing the Office of Health IT located at the Virginia Department of Health. Finally, Virginia has submitted very competitive applications for federal American Recovery and Reinvestment Act (ARRA) grants. The primary grant will facilitate the building of the new statewide HIE, revolutionizing healthcare information sharing and access in the Commonwealth.

Virginia has several, significant, health IT projects currently underway throughout the Commonwealth. These projects are led by various agencies and are the result of Virginia's collaborative efforts among the Health and Human Resources and Technology secretariats. The current health IT projects in the Commonwealth are:
- Health Information Technology Standards Advisory Committee (HITSAC)
- Virginia Health Exchange Network (VHEN)
- Virginia Immunization Information System (VIIS)
- Advanced Healthcare Directive Registry
- CommonwealthRX (ePrescription); and,
- No Wrong Door Initiative (Single Point of Entry for Service Delivery).

Federal Support for Health Information Technology Investments

As a valued investment, health information technology (IT) is being supported through various federal funding streams. Some developments are being funded through competitive grants from federal partners, such as the Centers for Medicare and Medicaid Services (CMS). Most recently,

the ARRA has allocated significant funding for states to design and implement health IT infrastructure throughout the country.

Nationwide, $2 billion has been designated for states or state designated entities to develop resource centers, research centers, and one statewide Health Information Exchange (HIE). In addition to the state designation, approximately $18 billion was ear-marked to incentivize hospitals and physicians in participating in health IT efforts.

The ultimate purpose of HIE is to continuously improve and expand health information services over time and to reach all health care providers in an effort to improve quality and efficiency. Rather than utilizing funding to re-create projects that are currently in motion, HIE funding allows states to build off of existing efforts to advance regional and state level HIE while moving towards nationwide interoperability.

Virginia's HIE plan will address 5 separate domains.
- Governance
- Finance
- Technical Infrastructure
- Business and Technical Operations; and,
- Legal/Policy

Examples of Virginia's HIE, the conceptual view and framework can be found in Appendix A.

American Recovery and Reinvestment Act funding for Virginia Health IT

Funding Source	Funding Amount
HIE Grant	11.6 million (final amt)
Resource Center Grant	8.5 million (avg award)
Research Center Grant	FOA not released
Meaningful Use Incentives To Eligible Providers in VA • Eligible providers will receive incentives – criteria to be finalized by Spring 2010	TBD
To Hospitals in VA – VHHA estimates • Maximum Medicare HIT incentives, in addition some will qualify for Medicaid incentives	347.5 million
Estimated Total for VA	**367.6 million (Specifics to be determined by March 2010)**

Evolution and Importance of Health Information Technology in Virginia

Over the course of time, we have witnessed a digital transformation of the practice of healthcare. Today, we have arrived with a better understanding of how to merge medicine and technology in order to make healthcare a more comprehensive and efficient process from initial intake and treatment to the storage of vital health information and personal medical records.

The interoperability of medical information has numerous benefits to the citizens of the Commonwealth:

- It provides data when and where they are needed
- It reduces the overall cost of health care
- It improves privacy and security of data exchange
- It helps to improve patient safety; and,
- It supports public health analysis and reporting.

Improving the health care technology infrastructure is important both to and for the Commonwealth. Ultimately, it offers the potential for both improving the quality and safety of patient care, while helping to control the growing cost of healthcare.

Health IT Leadership

The 2009 session of the Virginia General Assembly included two house bills that continue to facilitate advancement in Virginia's health information technology development. **House Bill 2198** Electronic Health Records; requires any electronic health records system or software purchased by a state agency to adhere to accepted standards for interoperability or to be certified by a recognized certification body. Additionally, **House Bill 2044** Health Information Technology; established an advisory committee Health Information Technology Standards Advisory Committee (HITSAC), consisting of persons with expertise in health care and information technology, to advise on the adoption of nationally recognized health information technology technical and data standards.

The HITSAC charter reads: *HITSAC will advise the Information Technology Investment Board (ITIB) on the approval of nationally recognized technical and data standards for health information technology systems or software pursuant to subdivision 6 of § 2.2-2458 in the Code of Virginia.* Guiding the work of the HITSAC, are a set of principles.

- Define a Health Information Exchange (HIE) utility and identify steps to create it.
- Focus on data requirements for both patient health purposes and public health purposes (research).
- Ensure patient-centric data are available within the Commonwealth.
- Recognize standards: the Commonwealth of Virginia Health Information Exchange (COV-HIE) is a utility; not a competitive advantage for its creators.

- Focus on interoperability as a critical success factor of COV-HIE.
- COV-HIE will be semantically interoperable with the Nationwide Health Information Network the standards for which are defined by the Health Information Technology Standards Panel (HITSP).
- Adopt national standards where they exist. In the absence of a national standard, adopt other standards to meet the Commonwealth's needs.
- Ensure standards have been validated prior to adoption.

Following these guiding principles, the HITSAC has achieved significant work to date, to include:
- Invited input from state agencies and stakeholders
  - Virginia Department of Health (VDH), Division of Consolidated Laboratory Services (DCLS/State Lab), Department of Medical Assistance Services (DMAS), and Virginia Information Technology Agency (VITA) Enterprise Architecture
  - Virginia Health Exchange Network (VHEN) Project –
- Reviewed Major / Non-Major Health IT projects with VITA
- Reviewed current HIE activities for neighboring states
  - Maryland, NOVA, District of Columbia, North Carolina, Indiana, Delaware, and Vermont
- Reviewed federal standards and HIE architectures
- Discussed clinical research information; and,
- Drafted COV-HIE Technical Infrastructure White Paper

In addition to the accomplished work of the HITSAC, the advisory committee has also made recommendations, to include:
- Adopt the HITSP Interoperability Specifications and Capabilities recommended by the Office of National Coordinator
  - The COV-HIE will support the interoperability and data exchange functions of "meaningful use" of Electronic Health Records (HER)
- COV-HIE will support the connectivity requirements of the Nationwide Health Information Network (NHIN) and provide connectivity to it for citizens of the Commonwealth
- All HIEs within the Commonwealth that wish to connect to the COV-HIE must comply with the HITSP Interoperability Specifications and Capabilities; and,
- The Commonwealth advocates for all Virginia Community HIEs to go through the COV-HIE to connect to the NHIN.

In addition to the HITSAC, Governor Kaine issued Executive Order 95 establishing the Virginia Health IT Advisory Commission (HITAC) and the Office of Health Information Technology, positioned at the Virginia Department of Health. HITAC is chaired by the Secretary of Health and Human Resources in consultation with the Secretary of Technology. Membership is appointed by the chair and contains representation from a broad range of stakeholders throughout the health information technology exchange. The Commission includes physicians, HIE and privacy experts and hospital and insurance executives. The mission of HITAC is to use information technology to improve health care quality and efficiency through the authorized and secure electronic exchange and use of health information.

HITAC responsibilities include:
- Provide healthcare stakeholder input to build trust in and support for a statewide approach to HIE
- Ensure that an effective model for HIE governance and accountability is in place
- Encourage and integrate the proliferation of telemedicine activities to support the Virginia healthcare improvement goals
- Monitor and support the activities of any regional extension centers awarded in the Commonwealth.
  - The purpose of Regional Extension Centers is to furnish assistance; education, outreach, and technical assistance. Additionally, their role is to help providers, in the geographic service areas selected, to successfully implement and meaningfully use certified electronic health record (EHR) technology to improve the quality and value of health care.

Virginia Health Exchange Network (VHEN)

The Virginia Health Exchange Network (VHEN) was developed in 2007 under the leadership of former Secretary of Technology, Aneesh Chopra. The ultimate objective was to utilize a network of collaboration among the Commonwealth's public and private health IT stakeholders to standardize and streamline administrative transactions; ultimately lowering costs, improving service quality, and encouraging broader reform. Represented in the network were 9 health care plans, 8 health systems, Medicaid and Medicare (Appendix B). These collective stakeholders represent more than 75 percent of Virginia's commercially insured citizens.

Progression of VHEN:
- Started in spring 2007
  - Leadership from Aneesh Chopra
  - Expert guidance from Louis Guittierez
  - Facilitation from Mark Rubin
- Reached consensus on common goal for standardization (CAQH CORE)
- Explore multi-payer portal technology
  - Drive electronic claims submission for providers not already doing so and lower calls and costs for plans and providers
  - Improve linkage of patient to valid payer for providers (lower self-pay) Fall 2008 RFI
  - Seeking technology partner for multi-payer portal
  - Execute on near term business cases
  - Provide a platform for broader transactions and savings in the future
- 3 finalists selected by Steering Committee for further consideration
  - Two of whom combined prior to final presentation
- *Availity* selected by Steering Committee December 2008
- Press release at tipping point of plan participants summer of 2009

Process of VHEN:
- Phased Approach:

- o Phase One: Implement VHEN Eligibility Verification Tool
  - Connect health care providers and health plans for real-time information exchange
  - Eligibility & Benefits
  - Other transactions as available through the health plan (e.g. Claim Status)
- o Phase Two: Implement Self-Pay / COB
  - Details TBD
  - Health Plan participation
  - Provide a platform for broader transactions and shared savings in the future

The benefits of VHEN are comparable for both health care providers and health care plans while differing in some areas, dependent upon the role of the entity in the healthcare process.

Health Care Providers	Health Plan
Secure and Compliant	
Saves Time and Money	
Access Multiple Plans via a Single Portal	Improves Provider Utilization of Electronic Solutions
Reduces Labor-Intensive Efforts to Obtain Information	Reduces Costly Phone-Calls
Improves Efficiencies	
Leaves More Time to Focus on the Patient	Enhances Provider Interaction

VHEN is well underway throughout the Commonwealth. November 2009 will include an Awareness Campaign and Training, and there will be two phases of deployment; January 2010 and March 2010.

VHEN is a multi-layered process and has the capability to expand in order to meet a variety of identified needs throughout the health Information Technology arena. Future applications for the Virginia portal can be found in Appendix C.

Virginia Immunization Information System

The immunization information system project is a multi-faceted approach to provide holistic immunization information. The statewide immunization registry will capture data to have reporting functionality in addition to providing demographic and historical immunization information. An additional function of the Virginia Immunization Information System is to provide inventory control. The system is pre-populated with a minimum of six prior years of immunization history, taken from downloads of hospital systems and insurance companies.

Advance Healthcare Directive Registry

The Virginia Department of Health (VDH) received an unfunded mandate to create an Advance Healthcare Directive Registry. VDH moved through the Public Private Educational Facilities Infrastructure Act (PPEA) process, subsequently receiving the Governor's approval for the project. In December of 2009, Microsoft and Unival were chosen as vendors to the project. Implementation will begin in January, 2010 with the rollout beginning in April, 2010.

CommonwealthRX

CommonwealthRx strives to increase patient safety and meet the needs of the Virginia public by establishing a collaborative framework that helps achieve an understanding of the benefits of electronic prescribing, while fostering education and implementation efforts to accelerate physician adoption and cooperation among prescribing constituents. According to one physician, the ultimate goal of CommonwealthRx is to utilize uniformed technology across the healthcare continuum in order for patients to receive more holistic care. ePrescribing is the first step towards a collaborative system of care.

No Wrong Door

Virginia's *No Wrong Door* initiative is a collaborative public/private effort between the Virginia Department for the Aging (VDA), Department of Rehabilitative Services (DRS), Department of Medical Assistance Services (DMAS), Department of Social Services (DSS), Department of Behavioral Health and Developmental Services (BHDS), Department for the Blind and Vision Impaired (DBVI), Deaf and Hard of Hearing (DHH), Office of the Attorney General (OAG), Virginia Board for People with Disabilities (VBPD), Community Integration for People with Disabilities, 2-1-1 VIRGINIA, SeniorNavigator, a 501(c)(3) non-profit organization, select Area Agencies on Aging (AAAs) and their local governments and local providers and consumers.

The *No Wrong Door* initiative connects public and private providers through the development of single, coordinated systems of information, referral, and access to aging and disability long-term support services. These systems are developed at a regional level under the direction of the Area Agency on Aging (AAA). Currently, ten regions of the state are involved in the *No Wrong Door* initiative.

The benefits of *No Wrong Door* are many. The most exciting benefit is that public agencies and participating private providers will be able to share client information in a confidential and secure manner through a web-based software system. This system includes an information and referral tool that is integrated with a comprehensive provider database, a comprehensive client assessment, and case management tool. Individuals receiving services through these No Wrong Door participating agencies will have to share their information once and with the client's permission, their information can then be sent electronically to other agencies. Because the providers use the same system, individuals will receive consistent information about services and support options no matter where they enter the system within the network.

In addition, the No Wrong Door initiative has given the public immediate access to information about support services for seniors and individuals with disabilities through *Virginia Easy Access* (www.easyaccess.virginia.gov). *Virginia Easy Access* is a web portal that is full of helpful

information about services and supports that are available across the Commonwealth for seniors, adults with disabilities, their caregivers and the providers that support them.

Conclusion

The goals of the various health information technology projects are laudable and both the Governor and General Assembly have recognized these programs for the important services they will provide. Health information technology allows comprehensive management of medical information and its secure exchange between individuals receiving health care and their various providers. Broad use of health information technology has the potential to; improve health care quality, prevent medical errors, increase the efficiency of care provision and reduce unnecessary health care costs, increase administrative efficiencies, decrease paperwork, expand access to affordable care, and improve population health.

Virginia's ability to bring together multiple partners, has greatly contributed to the success of the initial health information technology projects. Collaboration among key stakeholders has enabled the Commonwealth to leverage federal funding and enhanced incentives, ultimately contributing to more robust projects, with greater efficiencies and outcomes. Virginia continues to move forward with these health information technology projects and will continue to identify ways to enhance the healthcare process for all providers and the citizens of the Commonwealth.
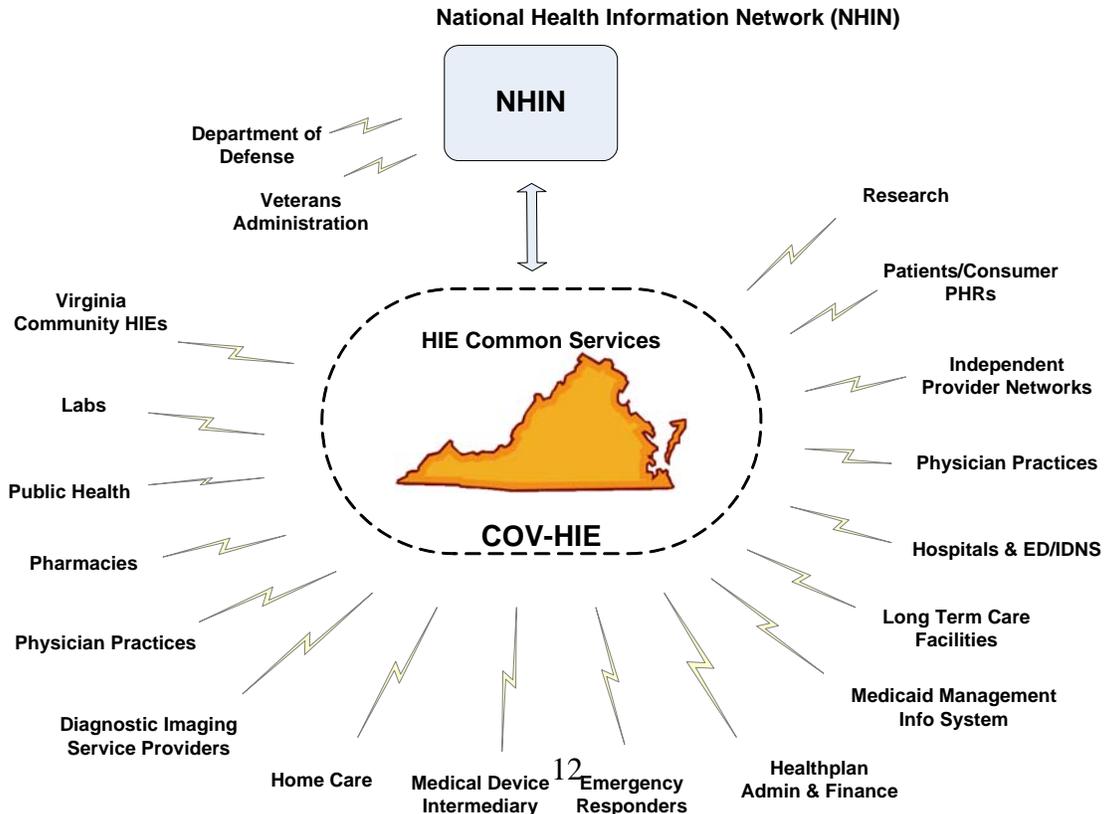
APPENDIX A

Commonwealth of Virginia – Health Information Exchange: Meaningful Use-Provider Examples

| Health Outcomes	2011 Objectives	2013 Objectives	2015 Objectives
Improve quality, safety, efficiency, and reduce health disparities	Use computer based order entry (CPOE) for all orders.* Electronic interfaces to receiving entities not required	Use CPOE for all orders	Achieve minimal levels of performance on quality, safety, and efficiency measures
	Implement drug-drug, drug allergy and drug formulary checks	Record family medical history	Medical device interoperability
Engage patients and families	Provide patients with electronic copy of their health information	Access for all patients to personal health record populated real time	Patients have access to self management tools
	Provide clinical summaries for patients for each encounter	Incorporate data from home monitoring device	Electronic reporting on experience of care

Orders - medication, laboratory, procedure, diagnostic imaging, immunization, referral

Commonwealth of Virginia-Health Information Exchange: Conceptual View

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APPENDIX A

Commonwealth of Virginia - Health Information Exchange Framework

Commonwealth of Virginia:
Framework for Health IT and Health Information Exchange
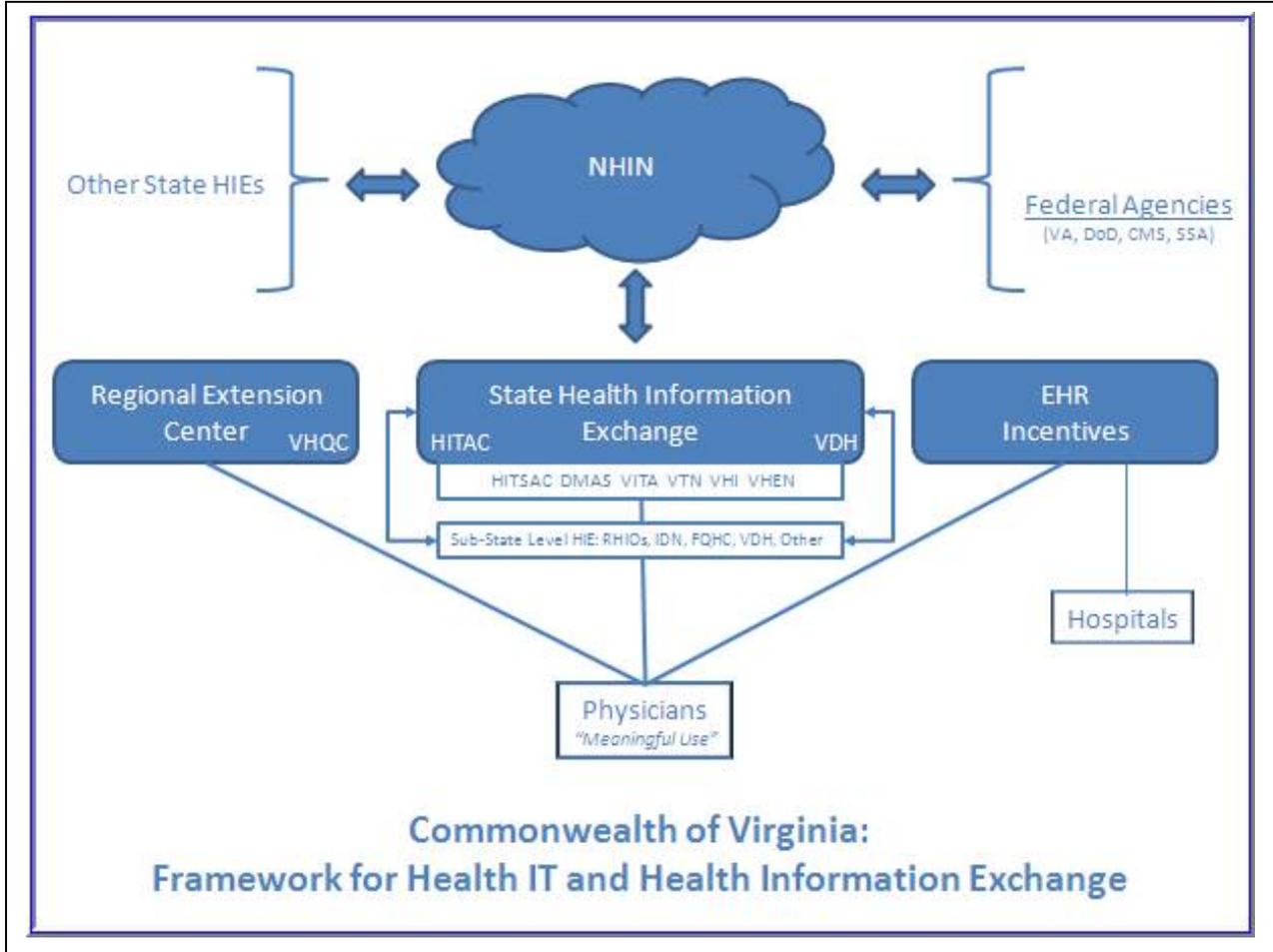
APPENDIX B

Virginia Health Exchange Network Participants, to date

Health Plans	Health Systems
Aetna	Bon Secours Health System
AMERIGROUP	Carilion Health System
Anthem	HCA
CareFirst	Inova Health System
CIGNA	Riverside Health System
Coventry	Sentara Healthcare
Kaiser Health Plan of the Mid-Atlantic States	University of Virginia Medical Center
Optima (Sentara)	Virginia Commonwealth University Medical Center Hospital
UnitedHealthcare	

Commonwealth of Virginia
Secretary of Technology
Department of Medical Assistance Services

APPENDIX C

Future Applications for the Virginia Health Exchange Network

Seamlessly calculate patient responsibility

Eligibility & Benefits

2009

Add swipe card to streamline E&B entry

Enable collection of patient payment