Maryland Health Information Technology
Strategic and Operational Plan Profile

State: Maryland

HIT Coordinator:
David Sharp, Ph.D.

State Designated Entity:
Maryland Health Care Commission (MHCC)

Award Amount:
$9,313,924

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Website:
http://mhcc.maryland.gov/index.html

Other Related ONC funding in Maryland:

University Based Training (UBT): Johns Hopkins University - $3,752,512

Curriculum Development: Johns Hopkins University - $1,820,000

Regional Extension Center (REC): Chesapeake Regional Information Systems for Our Patients (CRISP) - $5,535,423

Overview

The Maryland Health Care Commission (MHCC) is the official recipient of the State Health Information Exchange Cooperative Agreement award under the Maryland's Department of Health and Mental Hygiene. Through various meetings with the industry leaders and stakeholders, the Maryland State Plan was developed with specific use cases in mind that would facilitate, ensure, and sustain state-wide Health Information Exchange (HIE), providing the necessary services to enable participants to achieve meaningful use and improved health care outcomes.

The MHCC has partnered with the Chesapeake Regional Information System for our Patients (CRISP), which is the designated multi-stakeholder group to implement the statewide health information exchange. CRISP's founding organizations include: Johns Hopkins Medicine, MedStar Health, Erickson Retirement Communities, and the University of Maryland Medical System, with support from more than two dozen other stakeholder groups. The statewide HIE is currently connecting hospitals to the exchange in one of Maryland's 24 jurisdictions (counties that include Baltimore City). CRISP has initially focused on implementing the hospitals in Montgomery County and has signed Letters of Intent (LOIs) for over 48 hospitals.

Maryland's State Plan not only meets preliminary requirements but is unique in that it also includes specifics regarding: having the flexibility to meet the requirements that will be affiliated with stage 2 and stage 3 Meaningful Use, a proven approach to privacy and security, legislative support regarding financial sustainability, plans and processes for secondary use of data, and the use of process related and technical innovations.

Preliminary Plans, Processes, Technology and Capabilities

The Maryland State Plan describes a multi-stakeholder governance structure that will provide oversight, decision-making, and establish the policies/procedures necessary to facilitate secure, standards-based information exchange in accordance with ONC certified conventions. These processes will be developed and executed by MHCC's independent policy board. Members of this policy board will also be addressing organizational-level business practices that affect privacy and security, facilitate a state-wide HIE, and support the development of community data sharing policies.

Maryland also has developed a well thought out technical approach to facilitate data sharing in a secure environment guided by sound policy. The model makes available to providers a hybrid approach that combines a federated or distributed model, keeps the data at its source facilities or with providers, and uses the HIE as the conduit for sharing. The state plan outlines those standards utilized by the HIE, noting that only those existing standards recognized by the Secretary of Health and Human Services will be employed. In addition, considerations have been taken to ensure that emerging standards and recommendations, including the use of Direct, are monitored.

The coordination between governance and technology will allow for the prioritization and development of use cases that will drive Maryland's state-wide HIE capabilities. Maryland's market readiness assessment has described the state's current and capabilities regarding related to meaningful use stage 1, including: electronic prescribing and refill requests, clinical laboratories sending results electronically, and the exchange of summary of care records. The market readiness assessment also described other current and potential future capabilities.

Expanding Capabilities

The Maryland State Plan also outlines the HIE's strategy to work with the Maryland Department of Health and Mental Hygiene (DHMH) to utilize secondary data that will provide benefits to various local, state, and national public health agencies for the purposes of early identification of communicable diseases and population health threats. This may include the ability for EHRs or other Health IT to communicate immunizations, syndromic surveillance, notifiable lab results, and other pertinent information to local health departments.

The plan also provides an approach to ensure efforts to transform Medicaid through the federally mandated Medicaid Information Technology Architecture (MITA) architecture are compatible with the vision for HIT in the state and ONC. Medicaid and the MHCC are collaborating in the development of the Health Information Technology Planning-Advanced Planning Document (HIT P-APD). These efforts may also assist in information exchange with health plans what support electronic eligibility and claims transactions.

Addressing Privacy & Security

Prior to the development of the Maryland State Plan, a workgroup that consisted of eight health care sector groups was convened to assess business policies and practices in general, and security policies and practices in particular that could impede the development of an effective statewide HIE. This assessment included an examination of each sector group's perception of HIE; concerns regarding the benefits, risks, and challenges impacting each group; and various alternatives to address these issues. This group along with a MHCC assembled multi-stakeholder workgroup proposed a number of solutions that would guide efforts to establish a statewide HIE. They also assembled a list of implementation activities that they believed would guide HIE to a desired future state in Maryland. One of the implementation activities; recommended the need for separate MPI and Registry databases, which is the preferable method, instead of keeping all patient identifying and record locating information in one database.

Ensuring Financial Sustainability

The Maryland State Plan not only presents plans for financially stable state-wide HIE, but the state has committed $10 million in funds through its unique hospital all-payor rate setting system. Although grant funding is expected to speed the implementation of the statewide HIE, the Maryland General Assembly passed legislation (House Bill 706) entitled "Electronic Health Records – Regulation and Reimbursement" that was signed into law on May 19, 2009 by Governor Martin O'Malley. The law aims at expanding the adoption of EHRs through incentives of monetary value from the six largest state-regulated payors to providers who use certified EHRs capable of connecting to an HIE.

In addition, the statewide HIE's Finance Committee of the Advisory Board is charged with identifying the appropriate costs of HIE services. The work of this group includes provider surveys and the review of national efforts to determine price points for services provided by the statewide HIE. Initial funding received through the unique all-payor-rate-setting system will help offset participant costs during the first couple of years of operation. This is in an effort to ensure pricing stability in the early years of the statewide HIE.

Process & Technology Innovations

The Maryland State Plan calls for MHCC, in collaboration with its partners, to use Management Service Organizations (MSO). MSOs are approved organizations that provide centralized administrative and technology services and they allow providers to adopt a hosted certified EHR through a monthly subscription fee. MSOs provide an alternative to expanding EHR adoption. Under recent legislation, the MHCC is required to designate one or more MSOs by the fall of 2012 and ensure that the technology is compliant with the standards for Meaningful Use.

MSOs are considered are considered a viable alternative to the traditional stand-alone EHR client-server model, which requires practices to individually negotiate pricing and maintain the technology required to support the software. MSOs are capable of supporting multiple EHR products at reduced costs through economies of scale and bulk purchasing. MSOs may also be used to support other care-settings beyond inpatient and outpatient and include long-term care, assisted living, and other health care facilities.

Meaningful Use

	Landscape	Strategy
E-Prescribing	In Maryland, provider usage of e-prescribing is slightly more than five percent and around 75 % of the 1,628 pharmacies are capable of accepting some form of electronic prescription. This Use Case will improve the adoption of e-prescribing among the more than 3,102 priority primary care practices in Maryland and this Use Case will be aligned with the incentives available under the American Recovery and Reinvestment Act of 2009 (ARRA) and implemented accordingly.	The statewide HIE will initially leverage Surescripts as a source of medication information derived from both pharmacy data and claims data. This data will be accessed by routing provider requests through the HIE to Surescripts and locating the patient using that company's MPI service. As the statewide HIE evolves and e-prescribing participants and capabilities evolve, the ability for consumers to maintain medication history information in their own Personal Health Record (PHR)/Health Record Bank (HRB) will be possible.
Structured Lab Results	Maryland exceeds the national rate of computerized physician order entry (CPOE) adoption by roughly seven percent. The implementation of the structured lab ordering and results use case is expected to take more than a year to implement as negotiating connectivity with national, local, and hospital laboratories is expected to be somewhat of a lengthy process.	For primary clinical uses of the information, ancillary data such as laboratory results will be routed from the processing facility (i.e., laboratory or imaging center) through the statewide HIE to the ordering physician. In compliance with CLIA, a laboratory will not be required to seek any additional patient consent before transmitting lab results across the HIE to an ordering physician. Three hospitals, three radiology centers, Quest Diagnostics and the Laboratory Corp. of America are already participating in the exchange. These specific exchanges and supporting network is and will be managed by CRISP.
Patient Care Summary	Maryland is currently facilitating state-wide HIE. The patient care summary has not been the primary focus for information exchange but is scoped for stage 1 Meaningful Use and therefore is addressed by Maryland's State Plan.	As per the state plan, Maryland is in the process of developing the Clinical Summary Exchange Use Case that allows for the sharing of summary clinical data, such as a discharge summary, Continuity of Care Document (CCD), or Continuity of Care Record (CCR), to assure that health information is shared among authorized providers. The information contained in this Use Case may be constrained by EHR system capabilities. It is also important to note that practice workgroup information is cross referenced before patient summary data is displayed. In other words, patient summary data that is displayed may be practice specific unless consent has been otherwise set by the patient. This system prevents out-of-practice users from viewing clinical data to which they have no right. For web services, authentication and authorization security is provided by WS-security components such as SAML, the X.509 token profile, XML encryption, and XML digital signature.

HIE Inventory

Standards		**Quality Improvement**	
Nationwide Health Information Network Exchange Specifications		Care Coordination	**X**
Nationwide Health Information Network CONNECT		Quality Reporting	**X**
Nationwide Health Information Network DIRECT	**X**	Behavioral Health Information Exchange	
Plans to exchange with federal agencies or other states via Nationwide Health Information specifications	**X**		
Public Health		**Lab Strategy**	
Electronic lab reporting of notifiable conditions	**X**	Translation services	**X**
Syndromic surveillance	**X**	EHR interface	**X**
Immunization data to an immunization registry	**X**	Policy strategy	**X**
Patient Engagement		Order Compendium	
Patient Access/PHR	**X**	Bi-Directional	**X**
Blue Button		Alignment with CLIA	**X**
Patient Outreach	**X**	**E-Prescribing**	
Privacy and Security			
Privacy and Security Framework based on FIPS		Medication History	**X**
Individual choice (Opt In/Opt Out/hybrid)	**Opt out**	Incentive or grants to independents	
Authentication Services	**X**	Plan for controlled substance	**X**
Audit Log	**X**	Set goal for 100% participation	
Administrative Simplification		Controlled substance strategy	
Electronic eligibility verification	**X**	**Care Summaries**	
Electronic claims transactions	**X**	Translation services	**X**
Vendor		CCD/CCR Repository	**X**
Planning		**Directories**	
Core Services	**Axoltol**	Provider Directory	**X**
	Elysium-Google	Master Patient Index	**X**
	Health Language Inc. (HLI)	Record Locator Services	**X**
Plan Model		Health Plan Directory	
Identified model(s)	**Public Utility**		

Information for this profile was obtained from the approved Operational and Strategic Plan submitted to the National Coordinator for Health Information Technology as a condition of the Health Information Exchange Cooperative Agreement. The complete plan can be downloaded at: http://statehieresources.org/.