MARYLAND

State Health Information Exchange Cooperative Agreement Program

Funding Response

MHCC | MARYLAND HEALTH CARE COMMISSION

October 2009

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Letter of Intent

Marilyn Moon, Ph.D.
CHAIR

STATE OF MARYLAND

Rex W. Cowdry, M.D.
EXECUTIVE DIRECTOR

MARYLAND HEALTH CARE COMMISSION

4160 PATTERSON AVENUE – BALTIMORE, MARYLAND 21215
TELEPHONE: 410-764-3460 FAX: 410-358-1236

Funding Opportunity Title: American Recovery and Reinvestment Act of 2009, State Grants to Promote Health Information Technology Planning and Implementation Projects

Funding Opportunity Number: EP-HIT-09-001

September 5, 2009

David Blumenthal MD, MPP
National Coordinator for Health Information Technology
Department of Health and Human Services
200 Independence Avenue, S.W.
Washington, DC 20201

RE: Letter of Intent to Apply for Funding - Maryland Health Information Exchange Cooperative

Dear Dr. Blumenthal,

The Maryland Health Care Commission (MHCC) is pleased to submit a letter of intent to seek funding on behalf of the State of Maryland for the *Maryland Health Information Exchange Cooperative*. MHCC is an independent regulatory agency with a broad mission addressing health care quality, cost, and access. We have placed a high priority on advancing health information technology, including the implementation of a statewide health information exchange and the adoption of electronic health records, and are well positioned to use the funding from the *American Recovery and Reinvestment Act of 2009* to accelerate and enhance our plans to implement a private and secure statewide exchange. The Governor of the State of Maryland, the Honorable Martin O'Malley, has designated the MHCC as the state agency responsible for the state's application to the State Health Information Exchange Cooperative Agreement Program.

Strategic approach. Three years ago we began the process of planning a health information exchange by engaging numerous stakeholders to address fundamental policy issues and to plan a course of action.

- ***Building trust and consensus.*** Maryland believes that broad agreement on key policy issues - particularly privacy, security, and data uses - should precede the development of a health information exchange. MHCC has brought together a series of multi-stakeholder groups to discuss a range of policy issues and has published a number of major policy reports based on these consensus-building deliberations, listed in Attachment I. These deliberations formed the foundation for subsequent actions directed towards planning and implementing a statewide health information exchange.
- ***Planning the statewide exchange***. MHCC funded two independent multi-stakeholder groups in 2008 to develop two competing approaches for the governance, architecture, privacy and security, access and authentication, financing, and establishment of a sustainable business model. These reports were evaluated, and the best ideas from those reports and from a study of health information exchanges were consolidated into a Request for Applications (RFA) released on April 15th of this year.
- ***Designating and funding Maryland's statewide health information exchange.*** The MHCC received four responses to the RFA. A technical panel consisting of internal and external reviewers recommended that the Chesapeake Regional Information System for our Patients (CRISP) receive $10 million in startup funding from Maryland's all-payor system to implement a statewide health information exchange. The Maryland Health Services Cost Review Commission approved the funding on August 5th. *CRISP is a particularly strong not-for-profit collaborative effort among the Johns Hopkins Health System, MedStar Health, University of Maryland Medical System, Erickson Retirement Communities, and Erickson Foundation, with additional strong support from two dozen major stakeholders across the state, including minority and safety net provider interests. A complete list of stakeholders who have contributed to planning the exchange is provided in Attachment II.*
- ***Establishing a Policy Board with Strong Representation of the General Public.*** While a collaborative with strong provider representation will develop and operate the health information exchange, the policies governing the exchange will be established by the Policy Board associated with the MHCC. This separation of responsibilities assures a strong role for the public in both policy development and operational oversight. Members of the Policy Board have been selected to assure expertise, breadth of stakeholder representation, and a strong consumer voice in establishing the policies essential to building trust.

Maryland's Comprehensive State Plan: Broad goals, specific purposes, operational plans. *A statewide health information exchange serves the public interest by transforming a largely paper-based system into a private and secure electronic interconnected system that is transparent, that earns public trust, and that helps address health challenges facing Maryland, including preventable medical errors, disparities in the quality of care, high costs, administrative inefficiencies, and the lack of care coordination among providers.* Maryland's ambitious plan for advancing health information technology balances the need for information sharing with the need for strong privacy and security policies, and maintains a judicious approach to funding the health information exchange. A health information exchange capable of computable semantic interoperability will ensure that all health information is securely delivered electronically in real time to individuals and their providers when needed, and that this information is available for analysis for continuous improvement in care delivery and research.

The health information exchange is designed to deliver essential patient information to authorized providers at the time and place of care to help assure appropriate, safe, and cost-effective care; store and transmit sensitive health information privately and securely; provide patient access to important elements of an individual's clinical record to help engage patients in their own care; provide a means for the patient to exercise appropriate control over the flow of private health information, both as a matter of right and as a means of assuring trust; provide a secure method of transmitting administrative health care transactions; and gather information from the health care system to research effectiveness and cost-effectiveness of care, to measure quality and outcomes of care, and to conduct biosurveillance and post-marketing surveillance of drugs and devices.

MHCC's strategy to implement a statewide health information exchange is currently incorporated in a comprehensive State Plan. However, the current State Plan is not divided into separate strategic and operational plans as required by the planning guidance. MHCC is revising the State Plan to provide both strategic and operational plans to implement a statewide health information exchange and to advance electronic health record adoption. We anticipate submitting a State Plan with our application that is consistent with the guidance, that reflects the vision, goals, and objectives for health information exchange in the state, and that details the existing approach that Maryland will take to advance health information technology.

Active Involvement of Stakeholders in Implementing the Exchange. The CRISP organization is currently accepting nominations for Advisory Board members who will provide guidance to the operations of the exchange. The Advisory Board consists of three committees: Exchange Technology Committee, Clinical Excellence and Exchange Services Committee, and Finance and Community Outreach Committee. Each committee includes between 7 to11 members that will guide the procurement process, identify participant requirements, and provide input into the functional development of the health information exchange. The Advisory Board will facilitate an incremental process for the five domains supporting the grant program with key deliverables for each of the domains. Among other things, these deliverables are consistent with the statutory requirements for meaningful use. The infrastructure of the statewide health information exchange allows for ongoing planning for future growth and evaluation across the five domains. The existing plan already includes key activities and a four year budget for each domain.

- *Business and Technical Operations capacity*: CRISP anticipates maintaining a small staff initially and will expand staff based on work volumes. Key technology components such as the Master Patient Index, data registry, and data translation and interoperability services will be outsourced on the onset. Help desk services will be contracted to an organization that is experienced in helpdesk operations. Other solutions will be licensed and installed locally at the CRISP datacenter. *Expenditure over the past 5 years: $50,000. Anticipated expenditure over the course of the cooperative agreement: $25,000,000.*
- *Finance capacity*: The business model for the health information exchange includes startup funding through the state all-payor rate setting system. These funds will be used to support technology deployment, internal operations of the exchange, and the implementation of a defined set of Use Cases. The exchange is expected to begin generating revenue around year three and become sustainable within approximately five years. *Expenditure over the past 5 years: $80,000. Anticipated expenditure over the course of the cooperative agreement: $1,250,000.*
- *Governance capacity*: The health information exchange operates under the oversight of an Advisory Board. Representation on the Advisory Board will be broad-based, ensuring that

the many various perspectives from interested organizations and their constituencies are heard with respect to the exchange services. The Advisory Board will help the Board of Directors provide oversight and accountability of the organization. *Expenditure over the past 5 years: $350,000. Anticipated expenditure over the course of the cooperative agreement: $1,250,000.*

- *Legal and policy HIE capacity*: Legal counsel has been retained by CRISP to provide support to the policy development framework, privacy and security requirements for system development and use, data sharing agreements, evaluation of existing laws and regulations, and assistance in multi-state policy harmonization activities. *Expenditure over the past 5 years: $450,000. Anticipated expenditure over the course of the cooperative agreement: $2,500,000.*
- *Technical infrastructure capacity*: The technology vendor selection will consist of a formal competitive and transparent procurement process to ensure that Maryland and its citizens are best served. The exchange is expected to empanel an expert technology evaluation committee leveraging subject matter experts to procure the appropriate technology. The competitive acquisition process will be for the identification of a hybrid infrastructure supportive of decentralized data and services leveraging a Master Patient Index and a data registry to locate health information in edge servers. *Expenditure over the past 5 years: $250,000. Anticipated expenditure over the course of the cooperative agreement: $7,500,000.*

Coordination and Collaboration. Although the responsibility for strategic planning, broad policy development, and financial oversight of both the $10 million in state funds and any funds made available through this grant rest with the Commission and the Policy Board, while the responsibility for developing and operating the exchange rest with CRISP and its participating partners, we have taken active steps to assure effective coordination and meaningful collaboration. MHCC and the Policy Board are represented on CRISP committees, and CRISP has ex officio representation on the Policy Board, to assure good communication, close coordination, and rapid resolution of differences. We anticipate a similar productive collaboration with the National Coordinator for Health Information Technology in planning and advancing our statewide exchange, assuring that the exchange is consistent with the State Plan, and coordinating our efforts with others throughout the nation.

EHR Adoption as a Vital Prerequisite to Effective Health Information Exchange. MHCC believes that adoption and meaningful use of certified electronic health records with clinical decision support features, electronic prescribing, and order entry are crucial components of both an effective statewide exchange and a transformed health care system. As part of the 2005 legislative session, Maryland enacted a bill which created the *Governor's Task Force to Study Electronic Health Records*. The task force consisted of 26 individuals with a broad range of experience in health care and health information technology. Over a period of 18 months, the task force explored a number of issues related to electronic health records and developed a policy report for the legislature. These recommendations have been used to help shape many of the initiatives aimed toward advancing electronic health record adoption across the state.

- Maryland is one of four states participating in the *CMS Electronic Health Record Demonstration Project.* The CMS project is studying electronic health record adoption in small to medium size primary care physician practices. Maryland was selected based in part on our success in outreach and recruitment of physician practices.
- Following the passage of the *American Recovery and Reinvestment Act of 2009*, Maryland became *the first state to build on the Medicare and Medicaid adoption incentives* by passing

legislation requiring state-regulated payers to provide incentives for the adoption of electronic health records that parallels the requirements of federal incentives.

- MHCC has developed an electronic health record product portfolio that includes information of certified vendors for evaluative and comparative purposes. *MHCC has negotiated discounts with these vendors* for Maryland physicians and plans to assess user satisfaction.
- Legislation that emerged from the 2009 session requires *MHCC to identify one or more management service organizations that offer hosted electronic health records*. Hosted electronic health records have successfully been piloted in community health clinics, and are particularly appealing to providers in very small practices.
- *MHCC and CareFirst, one of the largest payers in the state, has facilitated the development of a collaborative* among safety-net providers to host electronic health record systems for its members. Over a two year period CareFirst has contributed nearly $1 million dollars to the initiative.

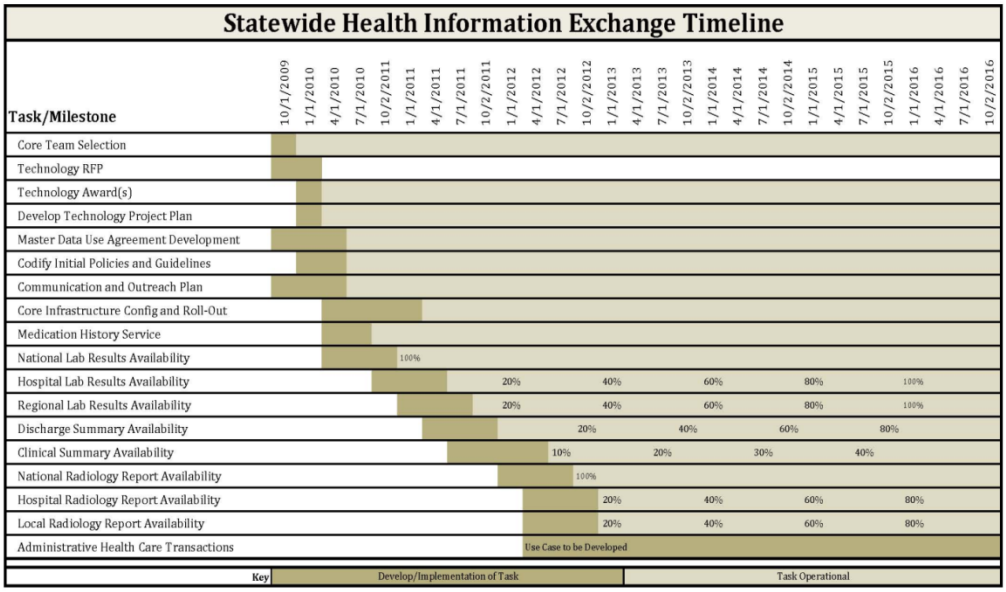
Coordination with the Regional Centers Program. Today, Maryland is home to approximately 5,035 primary care providers that provide care in about 2,325 practices. Many of the required activities aimed at assisting providers in becoming meaningful users of certified electronic health record technology, as stated in the *Health Information Technology Extension Program: Regional Centers Cooperative Agreement Program,* are consistent with MHCC's existing outreach and education strategy. *The state's designated health information exchange organization, CRISP, will seek a grant award during the first round of applications and will submit a preliminary application by the required due date. If awarded a Regional Center grant, CRISP will function as the primary contact and engage a number of non-profit organizations in the state to participate as sub-contractors to complete the work. The coverage area under the CRISP application includes all of Maryland.* MHCC will support CRISP in the outreach, education, and technical assistance programs necessary to meet the objective of assisting providers in improving the quality and value of care they furnish by attaining or exceeding the meaningful use criteria.

Leveraging Existing Health Information Exchange Efforts. Statewide, approximately 17 percent of acute care hospitals have implemented electronic data sharing initiatives with providers in their service area. These hospitals typically host the technology that enables a one-way transfer of a limited amount of data with a high speed Internet connection. Last year, MHCC convened a meeting of hospital chief information officers and various other stakeholders to reach consensus on a range of standards and policies to ensure that hospitals embark on data sharing initiatives that implement similar policies. Acute care hospitals in Maryland are also well positioned to operate as management services organization to host one or more electronic health record solutions. They are appropriately situated to provide a consistent way of managing privacy and security and ensuring the existence of robust physical and technical safeguards of electronic health information. In Maryland, hospitals are not alone in this capacity: a major association of community health centers has developed an MSO model providing a robust EMR and practice management to its members and is developing exchange capabilities with other providers. Commercial MSOs are also emerging. *Maryland's statewide health information exchange expects to facilitate the connection of these service system exchanges and emerging management services organizations with the exchange.*

Contacts. The primary point of contact from the MHCC for the *Maryland Health Information Exchange Cooperative* is David Sharp, Director of the Commission's Center for Health Information Technology. Please feel free to contact him via e-mail at dsharp@mhcc.state.md.us or directly at

(410) 764-3578. I can be reached at rcowdry@mhcc.state.md.us or at (410) 764-3565. Key personnel from the CRISP organization include the president, David Horrocks, david.horrocks@crisphealth.org, and Scott Afzal, scott@audaciousinquiry.com. Please feel free to contact either one of these individuals for more information about CRISP. Additional information regarding this organization is available at the CRISP website: http://www.crisphealth.org/.

Summary. After several years of planning and building stakeholder trust, Maryland has moved into the implementation phase of a statewide health information exchange. Funding available under the collaborative agreement will have two fundamental effects. First, it will enable the health information exchange to deploy an initial set of Use Cases across the state more rapidly and to add additional Use Cases rapidly based on the value to consumers and other stakeholders. Second, the collaboration with your office will broaden the available expertise, assure better coordination with efforts across the nation, and allow us to explore opportunities for Maryland to serve as a convenient test bed for initiatives of interest to the ONC.



This grant opportunity is valuable to Maryland as it strives to implement a statewide health information exchange that reaches all health care providers in an effort to improve the quality and efficiency of health care. The MHCC is enthusiastic about submitting an application and its State Plan to the Office of the National Coordinator for Health Information Technology by the October 16th due date. If you have any questions regarding our letter of intent or other issues, please feel free to contact either me or David Sharp directly. We look forward to developing an effective and innovative collaboration.

Sincerely,

Rex W. Cowdry, MD
Executive Director

Attachment I

MHCC Health IT Policy Reports	
Report Title	**Web Link (URL)**
Task Force to Study Electronic Health Records: Final Report	http://mhcc.maryland.gov/electronichealth/presentations/ehr_finalrpt0308.pdf
Review of the Task Force to Study Electronic Health Records 2007 Final Report Recommendations	http://mhcc.maryland.gov/electronichealth/EHRTaskForceSummaryFinal061909.pdf
Assessment of Privacy and Security Policies and Business Practices	http://mhcc.maryland.gov/electronichealth/assess_privacy_security.pdf
Privacy and Security Solutions and Implementation Report	http://mhcc.maryland.gov/electronichealth/solutions_implement_rpt0908.pdf
Service Area Health Information Exchange: A Hospital Data Sharing Community Resource Guide	http://mhcc.maryland.gov/electronichealth/SAHIE_03-06-09-WEBFinal.pdf
Health Information Technology: An Assessment of Maryland Hospitals	http://mhcc.maryland.gov/electronichealth/HospitalHITSurveyReportFINAL.pdf
Management Services Organizations: A Vision of State Designated Organizations for Physician Practices	http://mhcc.maryland.gov/electronichealth/MSOPRINT.pdf
CRISP Planning Report	http://mhcc.maryland.gov/electronichealth/CRISP_FinalReport.pdf
MCHIE Planning Report	http://mhcc.maryland.gov/electronichealth/MCHIE_Final_Report.pdf
CRISP Response to the Request for Application for a Consumer-Centric Health Information Exchange for Maryland	http://mhcc.maryland.gov/electronichealth/CRISP.pdf

Attachment II

Maryland HIE Stakeholder Participants

Maryland Health Information Exchange Policy Board

ACLU of Maryland
AIDS Legislative Council
Anne Arundel Medical Center
British American Auto Care
CareFirst Blue Cross Blue Shield of Maryland
Community Health Integrated Partnership
Genesis Healthcare
Hebrew Home of Greater Washington
Higher Ground, Inc.
Koss on Care
M&T Bank
Planned Parenthood of Maryland
Primary Care Coalition of Montgomery County
Sinai Hospital of Baltimore
Washington County Health System
Maryland Health Care Commission (*ex-officio*)
CRISP (*ex-officio*)

Chesapeake Regional Information System for Our Patients (CRISP)

Founding Board Members:

Erickson Retirement Communities, LLC
Johns Hopkins Health System Corporation
MedStar Health, Inc.
University of Maryland Medical System, Inc.
Erickson Health Information Exchange

Advisory Board Members:

To Be Named

Institutional Affiliations of Additional Participants in the Maryland Planning Process

APPTIS
AARP of Maryland
Access Carroll
Advanced Radiology
Adventist HealthCare
Advocates for Children and Youth
Aetna
AIDS Legislative Council
American Cancer Society
American Heart Association of Maryland
American Medical Informatics Association
American Society of Consultant Pharmacists
Anne Arundel Medical Center
Atlantic General Hospital
Audacious Inquiry
Baltimore City Medical Society
Baltimore Medical System
Baltimore Washington Medical Center
Bon Secours Hospital
Braddock Hospital
Bravo Health
British American Auto Care, Inc.
Calvert Memorial Hospital
CareFirst Blue Cross Blue Shield of Maryland
Carroll Hospital Center
Catonsville Diagnostic Imaging
Center for Health Information and Decision Support, University of Maryland
Chesapeake Eye Center
Chester River Hospital Center
Civista Medical Center
Clinical Information Systems
CMS - State Programs
Columbia Medical Practice
Community Health Integrated Partnership
Constellation Energy Group
CVS
Darnell Associates, Inc.
Delmarva Foundation
Delta Dental Plans Association
Dimensions Health System
Doctors Community Hospital
Dorchester General Hospital
Edward W. McCready Memorial Hospital
Emdeon Business Services
EPIC Pharmacies and EPIC Pharmacy Network, Inc.
The Erickson Foundation
Erickson Retirement Communities
Former Senator of Maryland & Privacy Advocate
Franklin Square Hospital
Frederick County Public Schools
Frederick Memorial Healthcare System
Garrett County Memorial Hospital
Genesis HealthCare
Ginger Cove Retirement Community
Good Samaritan Hospital of Maryland
Greater Baltimore Medical Center
Harbor Hospital
Harford County Medical Society
Harford Memorial Hospital
Health Care Information Consultants
Health Improvement Network
Healthcare for All
Healthcare for the Homeless
Hebrew Home of Greater Washington
Holy Cross Hospital
Howard County General Hospital
HR Anew, Inc.
James Lawrence Kernan Hospital
Johns Hopkins Bayview Medical Center
Johns Hopkins Community Physicians
The Johns Hopkins HIPAA Office
Johns Hopkins Medical Institutions
Johns Hopkins University & School of Medicine
Johns Hopkins Urban Health Institute
Kelly and Associates
Kennedy Krieger Institute
Kodak Dental Systems
Laboratory Corporation of America
Laurel Regional Hospital
Legal Aid Bureau
LifeBridge Health
Maryland Community Health Resources Commission
Maryland General Hospital
Maryland Hospital Association
Maryland Medicaid
Maryland State Board of Pharmacy
Maryland State Delegate
Matria Health Care
MedChi, The Maryland State Medical Society
MedStar Health
MedStar Health VNA
Memorial Hospital & Medical Center of Cumberland
Memorial Hospital at Easton
Mercy Medical Center
Mid-Atlantic LifeSpan
Montgomery County Medical Society
Montgomery Family Practice
Montgomery General Hospital
Montgomery Internal Medicine Association
Mount Vernon Pharmacy
Nachimson Advisors, LLC
NAMI of Maryland
National Institutes of Health
Neighborcare/NHS
Network Health Services
Northwest Hospital Center
Ober|Kaler
Office of the Attorney General of Maryland
Payerpath, Inc.
Peninsula Regional Medical Center
Personal Touch Home Care
Practicing Psychiatrist
Primary Care Coalition of Montgomery County
Prince George's Health Department
Prince George's Hospital Center
Provider Synergies
Quest Diagnostics
RxNT
Shady Grove Adventist Hospital
Shepherd's Clinic
Shepherd Pratt Health System
Sinai Hospital of Baltimore
Southern Maryland Hospital Center
Spiro Consulting, Inc.
St. Agnes Healthcare
St. Agnes Hospital
St. Agnes OB/GYN Associates
St. Joseph Medical Center
St. Mary's Hospital
Suburban Hospital
Summerville at Westminster
Summit Health Institute for Research and Education, Inc.
The Neurology Center
Union Hospital of Cecil County
Union Memorial Hospital
United Healthcare Mid-Atlantic
University of Maryland Medical System
University Physicians, Inc.
Upper Chesapeake Medical Center
VA Maryland Health Care System
Vermont Information Technology Leaders
Vindobona Nursing Home
Vulcan Enterprises, LLC
Walter Reed Army Medical Center
Washington Adventist Hospital
Washington County Health System
William Hill Manor
Xavier Health Care Service

Project Detail Overview

Project Title:	State Health Information Exchange Cooperative Agreement Program
States/territories:	State of Maryland
Applicant Name:	Maryland Health Care Commission
Address:	4160 Patterson Avenue, Baltimore, Maryland 21215
Contact Name:	David Sharp, Ph.D.
Contact Numbers:	Phone: 410-764-3578; Fax: 410-358-1236
E-Mail Address:	dsharp@mhcc.state.md.us
Web Site Address:	www.mhcc.maryland.gov
Congressional Districts:	Maryland Congressional Districts 1-8
Brief:	The Maryland Health Care Commission has placed a high priority on advancing health information technology, including the implementation of a statewide health information exchange and the adoption of electronic health records. In August 2009, Maryland designated a multi-stakeholder group to implement the statewide health information exchange, and allocated $10 million through the all-payor rate setting system to fund the initiative. Maryland is the only state to pass legislation requiring state-regulated payers to provide incentives for the adoption of electronic health records and has developed a web-based product portfolio. One of the largest payers in the state has facilitated the development of a collaborative among safety-net providers to host electronic health records.

Abstract

The Maryland Health Care Commission (MHCC) is the state agency designated by the Honorable Governor Martin O'Malley to advance health information technology (HIT) in the state. Three years ago the MHCC began the process of planning a health information exchange (HIE) by engaging numerous stakeholders to address fundamental policy issues and to plan a course of action. Legislation was passed in 2009 that required the MHCC to designate a multi-stakeholder group to implement a statewide HIE. Through a competitive process, MHCC selected a non-profit organization, Chesapeake Regional Information System for our Patients (CRISP), which includes Johns Hopkins Medicine, MedStar Health, University of Maryland Medical System, Erickson Retirement Communities, and more than two dozen other stakeholder groups. In August 2009, Maryland awarded $10 million through its unique all-payor rate setting system to fund HIE over three years. The HIE makes possible the appropriate and secure exchange of data, facilitates and integrates care, creates efficiencies, and improves outcomes.

A statewide HIE will support high quality, safe, and effective health care; make certain that data is exchanged privately and securely; ensure transparency and stakeholder inclusion; support connectivity regionally and nationally; be financially sustainable; and serve as the foundation for transforming health care in Maryland. The HIE will enable: critical information to be shared between providers of different organizations and different regions in real-time; the use of evidence-based medicine; public health initiatives in biosurveillance and disease tracking; and emergency preparedness efforts that will positively impact health outcomes by providing greater access to secure and accurate health information. The HIE hybrid architecture will be capable of connecting approximately 47 acute care hospitals and 7,907 physician practices throughout Maryland. Connection to the HIE will be implemented on a Use Case basis, which will be determined by CRISP with input from the Policy Board. The infrastructure will support the meaningful use requirements and eventually connect with other HIEs regionally and nationally. The CRISP Advisory Board will

guide development of the five domains supporting the grant program. The policies governing the exchange will be established by the Policy Board established by the MHCC. The HIE will provide a mechanism for authorized individuals to perform sophisticated analytics and reporting for public health, biosurveillance, and other appropriate secondary uses of data.

Current State

The Maryland Health Care Commission (MHCC) has recently moved into the implementation phase of a statewide health information exchange (HIE) after an extensive planning period. Maryland's pursuit of a statewide HIE has been marked by both challenges and successes. The challenges include those faced by virtually all health care stakeholders in the U.S.—poorly aligned incentives for many consumers and providers, concerns about privacy and security, lack of interoperability, and the high costs of implementing and supporting data sharing utilities. These challenges are not insurmountable, and the potential benefits warrant a collaborative, focused, and transparent approach to identifying solutions. MHCC's approach to a statewide HIE is based on strong privacy and security policies, and relies on services deployed incrementally through specific Use Cases. This approach, coupled with the adoption and meaningful use of health information technology (HIT), offers the prospect of transforming Maryland's health care system.

Maryland has many factors working in its favor for implementing a successful and sustainable statewide HIE. Stakeholder collaboration and broad consensus on key privacy and security issues has been paramount to the success in planning and implementing a statewide HIE. Maryland's relatively compact geography has mitigated some of the distance and communication challenges that some other state HIE efforts have encountered. Maryland's unique all-payor rate setting system provides a mechanism for funding this initiative where all private payers participate equally in the cost of implementing the statewide HIE.

Three years ago, the MHCC began the statewide HIE planning process by engaging numerous stakeholders to address fundamental policy issues and develop a course of action for implementing a statewide HIE. These efforts led up to the designation of a multi-stakeholder group in August 2009 to implement a statewide HIE with nearly $10 million funded through Maryland's all-payor rate setting system. This multi-stakeholder group, the Chesapeake Regional Information System for our Patients (CRISP), consists of Johns Hopkins Health, MedStar Health, University of

Maryland Medical System, Erickson Retirement Communities, and Erickson Health Information Exchange, along with the support of more than 25 other organizations.

Over the last 60 days, the statewide HIE has established a central office, identified support staff and consultants, accepted nominations for the Advisory Board, issued a Request for Information from core technology vendors, and is drafting the Request for Proposal for technology partners. The MHCC has assembled a Policy Board with oversight authority to establish the policies governing the statewide HIE. The members were selected based upon their expertise, consideration regarding the breadth of stakeholder representation, and a strong consumer voice in establishing the policies essential to building trust.

The statewide HIE expects to implement Use Cases based on an incremental approach basis. A partial list of Use Cases earmarked for implementation include: 1) Electronic Eligibility and Claims Transactions; 2) Electronic Prescribing and Refill Requests; 3) Electronic Clinical Laboratory Ordering and Results Delivery; 4) Electronic Public Health Reporting; 5) Quality Reporting Capabilities; 6) Prescription Fill Status and Medication Fill History; and 7) Clinical Summary Exchange. The Advisory Board will assist in prioritizing the Use Case deployment.

Policy Development

The basic framework for building consumer trust, collaboration with stakeholders, and transparency necessary to achieve HIE sustainability has been the diversity in the policy discussions that have occurred over the past few years. A successful statewide HIE poses technological and financial challenges, but the most vital challenges are privacy and security. The MHCC believes that broad agreement on key policy issues is needed to precede the development of a statewide HIE. Over the last several years, MHCC has brought together a series of multi-stakeholder groups to discuss a range of policy issues and has published a number of major policy reports. These deliberations were essential to moving forward with implementing the statewide HIE. A brief description of the reports produced from these efforts is provided below.

An Assessment of Privacy and Security Policies and Business Practices: Their Impact on Electronic Health Information Exchange

MHCC convened a workgroup that consisted of eight health care sector groups 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.

Privacy and Security Solutions and Implementation Activities for a Statewide Health Information Exchange

The MHCC assembled a multi-stakeholder workgroup to develop solutions and recommend activities that establish guiding principles and evaluate the privacy and security barriers for HIE implementation. The workgroup proposed a number of solutions that would guide the efforts to establish a statewide HIE, and they assembled a list of implementation activities that they believed would guide the statewide HIE to a desired future state in Maryland.

Service Area Health Information Exchange

Providers throughout the state are exchanging limited amounts of electronic patient information. Service area health information exchanges (SAHIEs) are emerging and are typically made up of providers in geographic areas that share the same patients across practices and settings. These providers must address challenges related to privacy and security, business practices, and technology. The MHCC convened a workgroup of chief information officers, privacy officers, and various other health care stakeholders to develop a resource guide that includes the policies regarding the patient's rights to access and control their health information; the range of business practices for access, authentication, authorization, and audit; the technical requirements for standards and process workflows; the communication mechanisms and outreach initiatives; the key community-level financial, organizational, and policy challenges; and the alternate data uses.

Planning for a Statewide Health Information Exchange

Building a successful HIE requires considerable planning in order to implement a business model that creates incentives for use, and recognizes the need for funding from those stakeholders who derive value and benefits from integration and utilization of technology that shares health information. The MHCC brought together two distinct multi-stakeholder groups (planning groups) to address the complex policy and technology issues from somewhat different perspectives. The two multi-stakeholder groups selected to participate in the planning phase were CRISP and the Montgomery County Health Information Exchange Collaborative (MCHIE). These teams focused specifically on addressing issues related to governance; privacy and security; role-based access; user authentication and trust hierarchies; architecture of the exchange; hardware and software solutions; costs of implementation; alternative sustainable business models; and strategies to assure appropriate consumer engagement, access, and control over the information exchange.

The Pathway to HIE

Implementing a statewide HIE is part of a long-term strategic plan to improve the quality, safety, and efficiency of care that will create cost savings for the Maryland health care system. The MHCC merged the best ideas from the planning reports into a single Request for Application (RFA). The proposed RFA was vetted with 10 existing HIE initiatives around the nation. The RFA was released on April 15, 2009, and four competing applications were received. After careful evaluation, the MHCC recommended to the Health Services Cost Review Commission (HSCRC) that the $10 million in funding through Maryland's all-payor rate setting system be approved for the CRISP response. Utilizing the all-payor rate setting system to assist with the HIE funding assures that private payers contribute to the building of the statewide HIE.

When fully implemented, the statewide HIE architecture will enable connections between Maryland's approximately 47 acute care hospitals and 7,907 physician practices. The statewide HIE will provide a mechanism that enables appropriately authorized individuals to perform select

analytical reporting. The statewide HIE will also allow secondary uses of data for public health, biosurveillance, and other appropriate secondary uses of data. Below is a brief discussion regarding the statewide HIE's implementation schedule for the required Use Cases.

Electronic Eligibility and Claims Transactions

Administrative health networks (networks) are required to be accredited to operate in Maryland. Select networks are expected to collaborate with the statewide HIE to implement this Use Case. Preliminary discussions are underway between the statewide HIE and a network that is used by one of the state's largest payers, CareFirst. The statewide HIE intends to engage in further discussions with a number of networks and to involve CareFirst in developing this Use Case. Though electronic eligibility and claims transactions was not an initial Use Case, the statewide HIE will use any potential funds from the grant opportunity to fully develop this Use Case. Initial implementation of this Use Case is projected to begin in the second year of operation.

Electronic Prescribing and Refill Requests

In Maryland, provider usage of e-prescribing is slightly more than five percent and around 75 percent 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. This Use Case will be aligned with the incentives available under the *American Recovery and Reinvestment Act of 2009* (ARRA) and will be implemented accordingly.

Electronic Clinical Laboratory Ordering and Results Delivery

Maryland exceeds the national rate of computerized physician order entry (CPOE) adoption by roughly seven percent. The implementation of this 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. The target date for full deployment of this Use Case is the end of 2011.

Electronic Public Health Reporting

Maryland has specific regulations governing public health reporting for a number of infectious or communicable diseases, such as meningitis, measles, mumps, and smallpox, to name a few. Currently, providers are required to submit information to public health officials for monitoring and reporting purposes with variable requirements on the reporting timeframe. Initial discussions regarding the implementation process for this Use Case has occurred. The statewide HIE will implement portions of this Use Case with public health agencies in 2011.

Quality Reporting Capabilities

Quality reporting is essential to inform and educate stakeholders, and it is an important component for achieving meaningful use. Interest in quality reporting continues to grow; however, a consistent mechanism for reporting does not exist. The statewide HIE is expected to make available quality reporting, as deemed appropriate, for use by authorized stakeholders. Although quality reporting is not an initial Use Case, components of this Use Case will be implemented in early 2011.

Prescription Fill Status and/or Medication Fill History

The Medication History Use Case was piloted during the HIE planning project and continues to function within three hospital emergency departments. Today, this Use Case is returning results for approximately 70 percent of patients who consent to participate in the pilot program. Medication History is an early Use Case with full implementation targeted by July of 2010.

Clinical Summary Exchange

The Clinical Summary Exchange Use Case 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 is constrained by EHR system capabilities. This Use Case will ensure that data or an appropriate image is available to participating providers. Portions of this Use Case will be operational in 2011.

Self-Assessment of Maryland's Current State

The MHCC convened an internal panel to conduct a self assessment of its State Plan. The State Plan was evaluated for completeness using the AHIMA Foundation's *State-level HIE Consensus Project, Self Assessment and Technical Assistance Checklist* (Appendix A). The self assessment provided assurance that the comprehensive State Plan includes both strategic and operational plans to implement a statewide HIE that are consistent with the funding opportunity guidance; that reflects the vision, goals, and objectives of the state; and provides details regarding the approach that Maryland will take to advance HIE across the state.

Proposed Project Summary

The MHCC expects to build a statewide HIE that is financially sustainable and organizationally sound. The statewide HIE will enable clinical information systems across the entire care continuum to share patient information; whereby providers will have access to patient data from multiple settings. Patients will be better informed about their health and the medical services available to them, giving them more ownership of their well being. In addition to serving as the mechanism for transforming health care, the statewide HIE will also provide reliable and timely information for research and population management. The rollout of the statewide HIE is consistent with meaningful use requirements and compliant with existing requirements of the *Health Insurance Portability and Accountability Act of 1996* (HIPAA), Administrative Simplification provisions and state privacy laws.

The MHCC plans to use funding from the ARRA to accelerate the implementation of the statewide HIE. The approach to implementing the statewide HIE is based on the best of ideas from two distinct multi-stakeholder planning group projects. The planning groups included individuals with experience in policy, technology, finance, and organizational aspects of health care within Maryland. The work of the planning groups has led to the implementation efforts for a statewide

HIE with a technical approach that is flexible, policy that is protective yet not prohibitively restrictive, and a financial approach that is sustainable.

Hybrid Technology

The statewide HIE will be a secure and trusted conduit rather than a centralized repository. A federated, or distributed, model that employs a personal health record (PHR) under the control of the patient was put forth by the two planning groups. The statewide HIE will maintain a central Master Patient Index (MPI) and a separate Registry of the location of the record within the system. The hybrid model also allows the centralization of records when directed by consumers. These functions do not constitute a centralized record, but rather establish a directory of information that allows records to be identified and located throughout the distributed system. The planning groups considered this approach less challenging to participants and individual patients because it is less disruptive to existing, trusted patient – provider relationships, and raises less regulatory issues in today's privacy and security conscientious environment.

Consumer Participation in the Statewide HIE

The statewide HIE will allow consumers the right to opt-out of the HIE and to be informed of a provider's access to and use of their health information. If a consumer elects to opt-out of the HIE, providers will not have the ability to access that consumer's information. Individuals will be informed of their participation rights through an intensive public awareness campaign. The statewide HIE will implement a simple and transparent opt-out process at each point of care within the HIE. Both planning groups recommended that the statewide HIE allow consumers the flexibility to opt-out at their discretion.

Consumer Control of Health Information

The statewide HIE will integrate with health record bank (HRB) and PHR applications that meet appropriate technology standards allowing consumers to have access to and control over their health information, and to generate a more comprehensive longitudinal record of their health

care in a single location under their control. Data in these applications may be generated directly from electronic health records (EHRs) or may be entered by the patient, and allow consumers to grant access to specific individuals or providers based on controls established by the consumer. PHRs will enable consumers to have some control over how they want to share their information beyond the protections of the statewide HIE.

Standards Based

The technological design of the statewide HIE is based on federally endorsed standards and integration protocols that bridge proprietary boundaries. Building the statewide HIE consistent with national standards mitigates a wide range of technology challenges for providers in Maryland and establishes the framework for eventual connectivity to the Nationwide Health Information Network (NHIN). The planning groups agreed that a statewide HIE must build upon approved standards to not only avoid vulnerability to vendor selection issues and risks, but to ensure compatibility with other HIEs and federal initiatives.

Incremental Design

The statewide HIE will pursue an incremental growth strategy, building from individual Use Cases that have a demonstrated need and provide clinical value, which are consistent with the services outlined in the *State Health Information Exchange Cooperative Agreement Program.* Maryland has moved into the implementation phase for the statewide HIE and will execute an approach that balances the type of services provided against the risk of deploying them too quickly. The planning groups cautioned against setting high initial technological and user acceptance thresholds in order to avoid missing the current window of opportunity.

HIT Adoption

The current low adoption rate of EHRs in Maryland cannot be ignored. Without more ubiquitous adoption, the sustainability of the statewide HIE may be questionable. Several specific strategies will help address this challenge. First, incentives from Medicare and Medicaid under the

ARRA and from state-regulated commercial payers under Maryland legislation will boost EHR adoption. Second, funding under the *Health Information Technology Extension Program: Regional Centers Cooperative Agreement Program*, which the statewide HIE is applying, will provide education and technical assistance funding to priority primary care providers in Maryland. Finally, the statewide HIE is implementing a provider portal for web-based access into the statewide HIE based upon recommendations from the planning groups. Initially, this will provide a low cost, low tech solution while encouraging migration to a more comprehensive solution. Recently enacted state law requires that the MHCC identify one or more Management Services Organizations that offer centrally-hosted EHR solutions at costs below those associated with stand-alone client-server EHRs installed in each provider office.

Financial Sustainability

The statewide HIE expects to achieve financial sustainability through monthly subscription fees based on the HIE services selected by the participating provider. Initial funding from the state is intended to improve and expand HIE services to reach all providers in an effort to improve quality and efficiency of health care. The statewide HIE expects to become sustainable within five years, and additional funding would help to facilitate this timeline. The planning teams agreed that sustainability of the statewide HIE is more likely to be achieved by incrementally deploying a specific set of Use Cases on a subscription basis.

Medically Underserved

The statewide HIE will implement Use Cases in areas around the state to ensure the broadest participation of the underserved populations. Particular emphasis during the planning phase was placed on identifying target areas and Use Cases that would bring the greatest value to the underserved population in Maryland. The planning groups spent a considerable amount of time formulating recommendations that would be inclusive of this particular population as it represents

an important part of the solution and a key part of the quality, access, and cost challenges in health care. This issue is addressed more extensively in a later section.

Project Plan – Key Components and Timeline

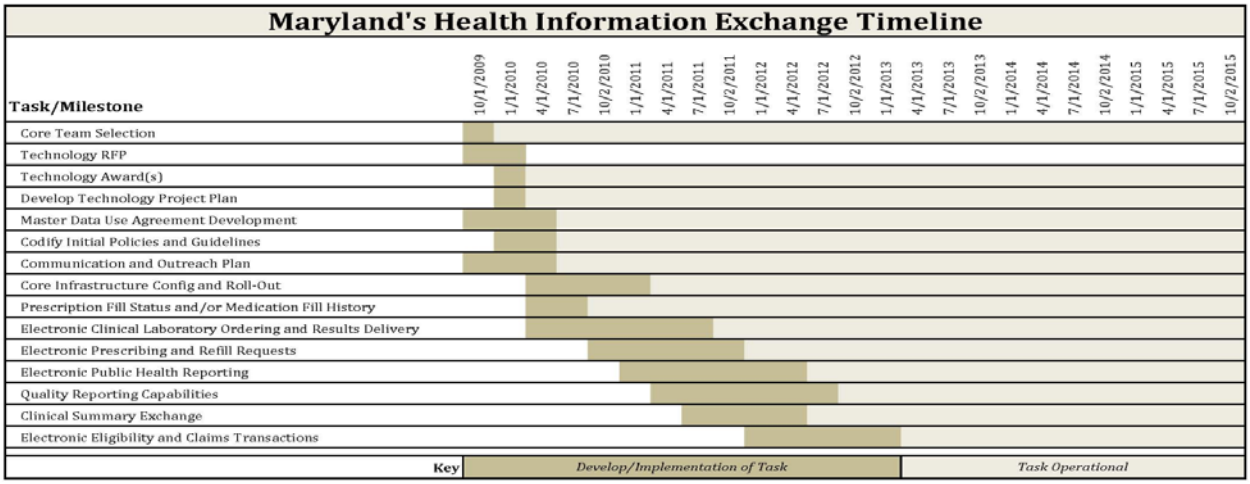
The governance of the statewide HIE has three primary components each with different governance and advisory responsibilities. The Policy Board is an extension of the MHCC that oversees policy development and the flow of state generated and federal funds to the statewide HIE. The statewide HIE Board of Directors consists of members appointed by the founding organizations and have overall management and governance responsibilities. The Advisory Board is comprised of industry leaders from around the state who are well-suited to address obstacles that arise. The Advisory Board is made up of three committees tasked with specific areas of responsibility and specific deliverables related to Use Cases. The Committees are: Exchange Technology, Clinical Excellence and Exchange Services, and Finance. The State Plan serves as guidance for the deliberations of the Advisory Board committees. The recommendations from the Advisory Board are then presented to the Board of Directors for determination of a final action.

The timeline for implementation of the Use cases represents a realistic, incremental approach for deploying key deliverables of the statewide HIE. The project plan template is developed to prepare the statewide HIE for implementation of each Use Case. The timeline and project plan both represent a reasonable approach to the implementation of the statewide HIE. Prior to deployment, Use Cases will undergo testing at a beta site in an environment that includes all of the conditions, circumstances, and influences surrounding and affecting implementation to ensure compatibility with the meaningful use requirements.

Project Plan – Use Case Implementation Template

Health Information Exchange Use Case Project Plan			
ID	**Task**	**Duration**	**Predecessor**
1	**Use Case**	169 days	
2	**Conceptual Agreement**	46 days	
3	Presentation to Stakeholder	1 day	
4	Stakeholder Question and Answer Period	21 days	
5	Stakeholder Letter of Support	1 day	
6	**Identify Initial Locations**	36 days	
7	Identify Number of Sites	1 day	
8	Indentify Current Technical Infrastructure of Sites	5 days	
9	**Vendor Analysis**	110 days	
10	Assess Vendor Options	2 days	
11	Obtain Participant Mix	1 day	
12	Get Commitment from 75% Participants	1 day	11
13	Vendor Connectivity	30 days	
14	**Legal Analysis**	88 days	
15	Review of Federal Law	15 days	
16	Review of MD State Law	15 days	
17	Memo Interpreting Fed and State Law	1 day	15, 16
18	**Contracting**	62 days	
19	Terms and Conditions	45 days	
20	Scope of Work	7 days	
21	HIE Organization Review	7 days	19, 20
22	Contract Executed	1 day	21
23	**Contracts with Participating Hospitals**	50 days	
24	Industry Assessment	5 days	
25	Transaction Price Negotiations	10 days	
26	Contract Development	21 days	
27	Contract Execution	1 day	25, 26
28	**Project team development**	15 days	
29	**Assign team (sites, vendor, consultants)**	15 days	
30	Determine hospital resource availability	1 day	27
31	Technical	14 days	30
32	Privacy/Legal	14 days	27
33	Education/Training	14 days	27
34	**Kickoff for all Stakeholders**	26 days	
35	Executives	1 day	
36	Staff	1 day	
37	**Requirements Gathering**	14 days	35
38	Outbound ADT Triggers	7 days	
39	Inbound Report	7 days	
40	Consent Process	14 days	
41	Provider Workflow	3 days	
42	Reporting and Quality Measures	7 days	
43	Establish Acceptance Criteria	3 days	
44	**Design**	7 days	37
45	Outbound ADT Triggers	7 days	38
46	Inbound Report	7 days	39
47	Consent Process	7 days	40
48	Provider Workflow	2 days	41
49	Reporting and Quality Measures	3 days	42
50	Create Test Plan	3 days	
51	**Build**	7 days	44
52	Outbound ADT Triggers	7 days	45
53	Inbound Report	7 days	46
54	**Consent Process**	7 days	
55	Opt-in Language Agreed Upon Between Sites	7 days	47
56	Provider Workflow	1 day	48
57	Reporting and Quality Measures	1 day	49
58	**Training and Education**	31 days	
59	Training Material Development	4 days	
60	Patient Education Material Development	7 days	
61	Location Sign-Off on Materials	1 day	60
62	Staff Training Session	6 days	
63	Support training	2 days	

Key Deliverables – Timeline



Privacy and Security Compliance

HIPAA set the standard for privacy in the electronic age, and provides a set of fundamental consumer protections governing health information exchange. The statewide HIE will function as a Business Associate and meet the requirements consistent with federal and state privacy laws. Protections will be implemented to secure all electronic patient information shared through the HIE. Participants are required to acknowledge compliance with the HIPAA regulations in their participation agreement. Legal counsel has been retained by the statewide HIE to ensure that policies adopted are consistent with HIPAA and the *Maryland Confidentiality of Medical Records Act* (MCMRA), (codified at Health-General § 4-301 *et seq.)*.

The Policy Board established by the MHCC will develop policies governing the statewide HIE. This separation of responsibilities assures a strong role for the public in the statewide HIE policy development. The statewide HIE has given considerable thought to managing the administrative, technical, and physical security procedures for assuring the integrity and confidentiality of electronic patient information. In particular, the planning process examined how respect for privacy in an exchange environment – especially in light of the capabilities of an MPI and record locator services – may require protections beyond those of HIPAA, including special opt-out and opt-in procedures. As part of its annual audit, the statewide HIE will be assessed for

compliance with the HIPAA privacy and security rule. The statewide HIE plans to collaborate with bordering states on data sharing initiatives, which include harmonizing privacy and security policies in 2010.

Privacy

In some areas, Maryland privacy laws are more stringent than the HIPAA requirements. Maryland law covers health care providers and facilities on original disclosures of information, and includes everyone on re-disclosure. Providers holding protected information have to compare both federal and state law to determine which legal rule or principle governs the disclosure of the information. Stringent requirements around access, authentication, audit, and authorization will be put in place. This will ensure appropriate user activity of the system; how the usage of the system is governed; how users are accurately and appropriately identified; and how records of that usage are captured, stored, and used for various audit purposes. Access to the statewide HIE is based on defined roles for each participating entity. Users are assigned access constraints and allowances based upon their designated roles. The statewide HIE will implement procedures to regularly review records of system activity, and will use audit logs, access reports, and security incident tracking reports to monitor user activity. Audit logs will be stored centrally at the HIE level and will include detailed information about the type of data that was accessed, who accessed the data, and when this information was accessed. The audit log will not store actual health information.

The HIE will have established levels of granularity deemed appropriate for users that achieves a balance between complexity, usability, and administrative overhead. Authorized individuals will have the ability to view and save select data for the purposes of treatment, while others may only have the ability to view data in the HIE. The management of authentication services through the statewide HIE is similar to access. The statewide HIE will implement a robust authentication policy using two factor authentication as a framework. Consumers requesting access to their medical record will continue to request this information from the treating provider.

These providers will maintain the notice of privacy practices and provide for an accounting of disclosures. Consumer access through either an HRB or the statewide HIE is a priority but critical questions about consumer authentication must first be resolved by the Policy Board.

Security

The statewide HIE will ensure the confidentiality, integrity, and availability of electronic patient information. Complying with the HIPAA Security Rule is expected to require significant time and effort on the part of the statewide HIE. Adherence to the 18 broad standards is viewed as a critical step to ensuring the protection of electronic patient information. The statewide HIE received full support from its Board of Directors for the organization's compliance with the security rule. The statewide HIE's Board of Directors consists mainly of provider organizations that view the security of the data as paramount. These individuals will help guide the statewide HIE as it develops a compliance process. The Advisory Board is tasked with defining what security rules need to be implemented. Vendor technology partners are required to demonstrate that their solutions meet or exceed the security requirements. Participation agreements stipulate that users comply with the HIPAA requirements. The statewide HIE will maintain an inventory of electronic patient information. The flow of electronic patient information will be easily tracked throughout the statewide HIE.

The statewide HIE will mitigate risk through a systematic and analytical approach that identifies and assesses these problems. The risk analysis will be used to develop appropriate and reasonable protections, and to anticipate risks and implement security measures. Security policies, procedures, and decisions will be documented by the statewide HIE and reviewed by the Board of Directors. The statewide HIE is well positioned to verify the accuracy of information through audit logs and conduct annual penetration testing to validate exploit the vulnerabilities and determine the adequacy of the security protections. The statewide HIE will comply with all aspects of the Security Rule on an ongoing basis.

Federal Information Security Management Act of 2002

The Policy Board plans to evaluate the impact of the *Federal Information Security Management Act of 2002* (FISMA) as it relates to the activities of the statewide HIE. The FISMA does not have any implication on the initial Use Cases or provider connections planned over the next year. A gap assessment will be completed around the end of 2010 to identify any operational changes that are required. The statewide HIE will engage the FISMA Center that provides training and resources to assist, as deemed necessary, with compliance. Ensuring compliance with FISMA is essential as the statewide HIE begins collaborating with the Veterans Affairs Maryland Health Care System.

Confidentiality of Alcohol and Drug Abuse Patient Records

Many of these confidentiality provisions have been anticipated by Maryland state law. The Policy Board will develop policies that include protections for any person who has applied for or been diagnosed or treated for alcohol or drug abuse at a federally assisted program. For the most part, the policies developed by the Policy Board will be stringent enough to ensure that the same high level of protections will be afforded to all the data that passes through the statewide HIE.

Communications Strategy

Consumers

The statewide HIE plans to implement an ambitious strategy to educate consumers throughout the region on HIE and the benefits of participating in the statewide HIE. A robust education program will reduce consumer hesitancy and will encourage consumers to allow their information to flow through the statewide HIE. The comprehensive approach will also include information about how consumers can exert control and manage their personal health data. The plan includes a combination of efforts tailored to a diverse audience to ensure both the simplicity and completeness of the message. The approach will include mechanisms to account for those in our communities that have lower literacy rates. Key elements of the strategy include:

- Publishing all materials in various languages that are spoken in the region;
- Publishing materials that are appropriate for a variety of educational levels;
- Using community gathering locations for outreach and educational sessions (including faith-based organizations, community-based organizations, schools, health clinics, etc.);
- Placing informational brochures in non-traditional target locations within communities; and
- Offering educational opportunities during conferences that are geared towards those that work and support underserved communities.

Providers

The statewide HIE plans to engage physicians in the HIE through education, involve them in decisions concerning the implementation, and provide a feedback mechanism that will facilitate changes in a timely manner. These components are vital to increase physician EHR adoption and HIE participation. Education will center on the explanation, description, and benefits of a statewide HIE in improving health care quality and efficiency, preventing medical errors, and reducing health care costs by delivering essential information to the point of care. Education will also highlight the usefulness of the statewide HIE for addressing issues including quality and efficiency measurements, pay-for-performance, pay-for-participation, e-prescribing, and emerging care delivery models such as the Patient Centered Medical Home. The existing strategy is to divide the state into geographical territories and assign a Provider Outreach Coordinator (POC) to each area. The POC's role includes coordinating and understanding practice readiness to participate in the statewide HIE and leveraging multiple avenues to educate physicians regarding how they can participate. Key elements of the strategy include:

- Presenting at regional town hall meetings;
- Routine literature distributed through MedChi, The State Medical Society's listserv;

- Educating practice managers and administrators at monthly trade association meetings; and
- Distribution of education material through the specialty medical societies.

Community-Based Organization Involvement

Maryland community-based organizations have a reputation for working tirelessly to protect and promote health care in communities where many consumers lack access to affordable, quality care. These organizations are a vital part of transforming Maryland's health care system through implementing a statewide HIE. Community-based organizations were eager to take part in the planning phase; their participation provided the two planning groups with an appreciation for the challenges that needed to be addressed in the recommendations for a private and secure statewide HIE. This same level of enthusiasm has carried over into the implementation phase. Community-based organizations will continue to provide essential insight to the ongoing efforts of the implementation of the statewide HIE with representation on the Advisory Board and the Policy Board. Leading community-based organizations involved in the statewide HIE initiative include:

- Baltimore Medical System, a network of seven clinics serving many of the neediest communities within Baltimore City and Baltimore County. These communities have high rates of unemployment and poverty, low levels of education and job skills, and few or no health services.
- Higher Ground Community Development, a faith-based organization that engages in service delivery in low-income urban communities. This organization is able to educate the religious sector and provide important influence to urban communities.
- The Shepherd's Clinic, a non-profit health clinic in Baltimore City providing primary and specialty health care to Baltimore residents without medical insurance. This population is unable to afford the high cost of private insurance yet do not qualify for government health care programs.

- The Summit Health Institute for Research and Education, a nonprofit organization promoting health and wellness for all people. This organization works to eradicate health disparities and aid vulnerable populations in attaining optimal health.

Community-based organizations play a critical role in assuring access to health care for Marylanders who are uninsured or who experience other barriers to care. The statewide HIE criteria to select the initial Use Cases includes an assessment of services that would produce the greatest benefit to providers and consumers represented by community-based organizations.

Underserved Populations

Implementing a statewide HIE in Maryland is considered an integral part of broader solutions to address disparities in health care and the well being of the underserved populations. These individuals share more than one characteristic; they may be poor, uninsured, have limited English language proficiency, and/or lack familiarity with the health care delivery system. While ethnic and racial minority groups are not by definition underserved, they are disproportionately represented among the underserved. Disparities are a cause for particular concern in Maryland, as the State's minority population is proportionately larger than in the average state. The statewide HIE will provide special benefits to the medically underserved and other special populations, e.g., newborns, children, the elderly, and persons with disabilities. When coupled with EHRs and clinical decision support, the HIE can help reduce unjustified treatment variations across populations, including underserved, minority, and ethnic groups.

A large portion of the consumer outreach component includes educating the underserved population through materials that are comprehensive and accurate and describe key concepts in terms that are understandable to the intended audience. The planning groups struggled to find the right strategy to empower and effectively reach consumers in all settings. Given the importance of the statewide HIE to impact the underserved, emphasis has been placed on implementing the HIE in a way that best supports clinical workflow and provides the greatest opportunity of empowering

consumers to take an active role in the management of their own care, or the care of another individual for whom they are the primary caregiver. The statewide HIE will eventually offer case management tools and implement technology to support EHRs for specific prompting strategies that remind the priority primary care providers that patients are due for clinical examinations, vaccinations, or diagnostic tests, for example. The potential secondary uses of the data will be explored more in-depth during the implementation phase.

The planning groups noted that the underserved populations differ from other communities, with notable differences existing between the underserved populations. They proposed that Use Case deployment be handled in such a way as to respond quickly to variation in underserved communities. The Advisory Board is tasked with examining the impact of the Use Cases as they are implemented across different segments of the underserved to identify potential disconnects between the design and applications within these communities. Community-based organizations throughout the state agree that moving toward a more digital environment where health information and knowledge is generated, captured, and shared securely, efficiently, and in a targeted manner is an important structural step in improving health care delivery in Maryland. The statewide HIE will serve as a vital component to address the state's needs for the underserved population.

Stakeholder Involvement

Stakeholder interest with participation in the planning and implementation of the statewide HIE has grown over the last several years. A broad range of stakeholders have participated in a number of workgroups that tackled challenges related to policy development and implementation of a private and secure HIE. A diverse group of stakeholders from across the state participated in the planning projects that developed two competing approaches for the governance, architecture, privacy and security, access and authentication, financing, and establishment of a sustainable business model. Stakeholders from the two planning groups, including stakeholders who were not

a part of the planning project, are working together to build a statewide HIE that reaches all providers in an effort to improve the quality and efficiency of health care.

Stakeholders will participate in one of the three Advisory Board Committees. Each committee includes about 10 members that will guide the procurement process, identify participant requirements, and provide input into the functional development of the statewide HIE. The Advisory Board will facilitate an incremental process for the five domains supporting the grant program with key deliverables for each of the domains consistent with the meaningful use requirements. Approximately 25 stakeholders were also invited to participate on the MHCC Policy Board. The Policy Board has broad oversight responsibilities and is specifically tasked with developing policies for privacy and security.

Health Care Providers

Representatives from MedChi, The Maryland State Medical Society, participate on the Advisory Board and the Policy Board. Several specialty societies have expressed a willingness to provide support for provider outreach and education activities. The Maryland Hospital Association also has representation on the Advisory Board and Policy Board. These two associations represent more than 10,000 practicing physicians and 47 acute care hospitals in Maryland.

Health Plans

The Advisory Board and Policy Board include representation from the state's largest payer, CareFirst. Almost 90 percent of the insured population is covered by two health plans in the state. The other health plan, which is a national payer, has expressed an interest in participating on the Advisory Board. For the most part, nearly all 42 payers doing business in the state have expressed support at some level for a statewide HIE.

Patient or Consumer Organizations

The majority of individuals that participate on the Policy Board represent consumers. The diversity among the consumer members is notable and these individuals are well-suited to ensure

the interest of the underserved and special populations are appropriately included in the policies developed by the Policy Board. The Advisory Board also includes consumer representation.

Health Information Technology Vendors

The Advisory Board includes a vendor representative from an HIT organization. The statewide HIE has established a process to gather input from the vendor community. Feedback from vendors will be evaluated by the Advisory Board. Vendor representation is not included on the Policy Board.

Health Care Purchasers and Employers

The Policy Board and Advisory Board both include individuals representing large and small employers. Purchasers are among the principal beneficiaries of HIE. Their unique perspective will enable the statewide HIE to address key issues related to privacy and security, and will help build trust in the electronic exchange of health information.

Maryland State Medicaid Agency

The Maryland state Medicaid agency has representation on the Policy Board. The inclusion is particularly important due to Medicaid's role as a purchaser of health care and the intimate relationship between Medicaid health information technology projects and the statewide HIE.

Public Health Agencies

The Advisory Board and the Policy Board include public health representation. These individuals will provide oversight and insight into policy development and Use Case design. This will ensure appropriate coordination for public health and biosurveillance, and the consideration of secondary data use in a manner that is consistent with the meaningful use requirements.

Health Professions Schools, Universities, and Colleges

The Advisory Board will collaborate with select local universities and community colleges on workforce development programs and in establishing an internship program. The statewide HIE views academia as an essential component in expanding the HIE workforce. The Advisory

Board may also seek input on select Use Case design, and guidance on security testing from some of the larger universities on the technical infrastructure.

Clinical Researchers

The Policy Board includes a retired physician with a strong medical informatics background who has been involved in the design of clinical research systems at the National Institutes of Health, and subsequently in the design of primary care information systems. This individual is expected to assure that the statewide HIE meets the needs of the clinical research community. During the planning projects this individual made significant contributions to the design of the infrastructure and key policy required to support the exchange of electronic patient information.

Other Users of HIT

The Advisory Board and Policy Board include nurses, practice administrators, and hospital chief information officers. These representatives bring a unique perspective as individuals that either support providers in care delivery or maintain the technology.

Required Performance Measures and Reporting

Reporting requirements and performance measures have been established to guide the progress and development of the statewide HIE. These requirements are consistent with the *State Health Information Exchange Cooperative Agreement Program* criteria. The statewide HIE will monitor and track performance related to privacy and confidentiality, technical performance, business practice, resources, and security. A combination of system reports, user satisfaction surveys, town hall meetings, and independent audits will be used to collect data used in assessing performance of the statewide HIE. Reporting will be used to strengthen accountability about what the statewide HIE plans to achieve and what it is accomplishing.

Operational reporting will measure performance and help encourage innovation as the statewide HIE is being implemented. Financial reporting will be used to develop budgets that are based on realistic costs and benefits, not just historical patterns. Select operational reports will

measure performance consistent with the requirements included in the *Government Performance Reporting Act of 1993* and ARRA. These reports will also include the number of jobs that have been preserved and created. The statewide HIE is required to submit monthly, quarterly, and annual reports to the state that address performance within the five domains. The following responses are based on the implementation of the State Plan.

Reporting Requirements

Governance

What proportion of the governing organization is represented by public stakeholders?

The MHCC interprets "public stakeholder" to include all individuals primarily representing the broad public interest, such as government agency employees, consumers, and purchasers.

- The MHCC Policy Board, the primary part of the governance representing the public interest, has approximately 14 public stakeholders (approximately 56 percent of the total membership), of whom 3 are from government, 9 are consumers, and 2 are purchasers;
- The statewide HIE Board of Directors has no public stakeholder members, since the exchange is being implemented by a broad coalition of provider organizations; and
- The statewide HIE Advisory Board anticipates having approximately 15 public stakeholders (approximately 50 percent of the total membership), of whom 3 are from government, 9 are consumers, and 3 are purchasers.

What proportion of the governing organization is represented by private sector stakeholders?

The MHCC interprets "private sector stakeholders" to include individuals primarily involved in health care delivery or health information technology, such as provider, payer, or vendors. Using this definition:

- The MHCC Policy Board has 11 "private sector stakeholders" (approximately 44 percent of the total membership) of whom 9 are providers, 2 are from payers, and none are vendors;
- The statewide HIE Board of Directors consists entirely of private sector stakeholders, since the statewide HIE is being implemented by a broad coalition of provider organizations; and
- The statewide HIE Advisory Board is expected to have approximately 15 private sector stakeholders (approximately 50 percent of the total membership), of whom 9 are providers, 5 are from payers, and 1 is a vendor.

Does the governing organization represent government, public health, hospitals, employers, providers, payers, and consumers?

The governing organization consists of the MHCC Policy Board, three academic institutions and a national long term care provider based in Maryland. The Advisory Board is represented by government, public health, hospitals, employers, providers, payers, and consumers. The statewide HIE is intended to be consumer-centric with representation predominantly by individuals that represent the consumer interest.

Does the state Medicaid agency have a designated governance role in the organization?

The Medicaid agency is a member of the Policy Board and serves as an ex-officio member on the Advisory Board. As a member of the Policy Board, the Medicaid agency will help craft the policies and procedures needed to ensure privacy and security, and integration with the Medicaid Information Technology Architecture.

Has the governing organization adopted a strategic plan for statewide HIT? Has the governing organization approved and started implementation of an operational plan for statewide HIT?

The statewide HIE will use the State Plan to implement HIT approved by the governing organization. The State Plan contains the activities necessary to implement the statewide HIE.

The statewide HIE began implementing the operational plan two months ago. Representatives from the governance participated in developing the operational plan.

Are governing organization meetings posted and open to the public?

As a part of the MHCC, the Policy Board meetings follow the State's Open Meetings Act (Act). This Act outlines the process and procedures in holding open meetings, which must be open to the public unless the meeting concerns administrative, judicial, or quasi-judicial functions. These meetings are posted in the Maryland Register, the MHCC website, and the statewide HIE's website. The statewide HIE will also conduct Advisory Board meetings in a manner consistent with the Act. Public notice will be posted on the statewide HIE and MHCC website.

Do regional HIE initiatives have a designated governance role in the organization?

Regional community data sharing initiatives within Maryland, while few in numbers, are represented either on the Board of Directors, the Advisory Board, or the Policy Board. Representatives from these initiatives have participated in the policy workgroups and in the planning phase.

Finance

Has the organization developed and implemented financial policies and procedures consistent with state and federal requirements?

Both the MHCC and the statewide HIE have implemented financial policies and procedures that are consistent with all of the state and federal requirements, and the statewide HIE has applied for 501(c)(3) status. The statewide HIE has retained Ober|Kaler as legal counsel to ensure compliance with all state and federal requirements.

Does the organization receive revenue from both public and private organizations?

The statewide HIE has received $10 million in funding through Maryland's all-payor rate setting system. This funding is best characterized as private funding since it comes from payers that pay hospital rates. The statewide HIE has also received funding from the Erickson Foundation and in-kind contribution from providers, payers, and government stakeholders. The State Plan

calls for the organization to receive subscription funding on an on-going basis following implementation of an initial set of Use Cases.

What proportion of the sources of funding to advance statewide HIE are obtained from federal assistance, state assistance, other charitable contributions, and revenue from HIE services?

The bulk of funding for the statewide HIE is based upon the all-payor hospital rate funds previously discussed. These funds will serve as the matching funds for the federal cooperative agreement state funds. The founding organizations have made sizable monetary contributions to the effort, and more than 25 participating organization have contributed significant in-kind investments to the planning and implementing of the statewide HIE. Altogether, roughly 10 percent is attributed to monetary and in-kind contributions other than the all-payor funding.

Of other charitable contributions listed above, what proportion of funding comes from health care providers, employers, health plans, and others (please specify)?

The majority of the charitable contributions are through not for profit providers and the Erickson Foundation. Modest contributions are received from health plans and employer groups other than a grant for $250,000 from the Erickson Foundation. All of the charitable contributions received to date have been in-kind. It is estimated that 7 percent is from not for profit providers and the Erickson Foundation, with the remaining 3 percent from employers, consumer groups, businesses, and health plans.

Has the organization developed a business plan that includes a financial sustainability plan?

A financial sustainability plan based on Use Case adoption is included in the State Plan. The statewide HIE's financial statements project financial sustainability by the fifth year of operation.

Does the governance organization review the budget with the oversight board on a quarterly basis?

The statewide HIE submits monthly financials to the Board of Directors and MHCC. Financial statements will be provided quarterly. The Board of Directors reviews this information at its

monthly meetings. MHCC meets with the President of the statewide HIE to discuss the financials each month.

Does the recipient comply with the Single Audit requirements of OMB?

The MHCC is expected to comply with The Single Audit Act of 1984, Single Audit Act Amendments of 1996, Circular No. A-133, *Audits of States, Local Governments, and Non-Profit Organizations*, and the OMB Circular Supplement and Government Auditing Standards.

Is there a secure revenue stream to support sustainable business operations throughout and beyond the performance period?

The existing State Plan outlines the approach to achieving sustainability based on a specific set of Use Cases within five years. Among other things, the incremental approach to implementing Use Cases is based on funding and intended to ensure financial sustainability. The existing model for sustainability will remain valid beyond the performance period.

Technical Infrastructure

Is the statewide technical architecture for HIE developed and ready for implementation according to HIE model(s) chosen by the governance organization?

The statewide HIE has moved into the implementation phase and will secure core technology based upon a competitive RFP process in the fall. The Advisory Board will make recommendations to the Board of Directors prior to executing technology agreements.

Does statewide technical infrastructure integrate state-specific Medicaid management information systems?

The statewide HIE is collaborating with the Medicaid program to implement technology that will support the Medicaid Information Technology Architecture transformation. This coordination will ensure integration between the statewide HIE and the existing Medicaid Management Information System.

Does statewide technical infrastructure integrate regional HIE?

The statewide HIE will implement a technology infrastructure based on widely recognized standards that will allow connectivity with community data sharing initiatives across the state

and eventually across state borders. Over the last year, the MHCC has been consulting with groups that have implemented a SAHIE to provide guidance in identifying the range of standards that can be deployed in order to remain compatible with the State Plan.

What proportion of healthcare providers in the state are able to send electronic health information using components of the statewide HIE Technical infrastructure?

The statewide HIE began implementing the operational plan approximately two months ago. It currently has a pilot program in place for the Medication History Use Case. One of the first priorities of the statewide HIE is to procure technology solutions for sending electronic patient information. An RFP is scheduled for release in the fall.

What proportion of healthcare providers in the state are able to receive electronic health information using components of the statewide HIE Technical infrastructure?

While today only a modest few Use Cases supporting electronic HIE are underway, roughly 20 percent of providers and almost 77 percent of hospitals have an EHR. The statewide HIE expects to implement the initial Use Cases with about 85 percent of Maryland providers.

Business and Technical Operations

Is technical assistance available to those developing HIE services?

MHCC currently provides some technical support to those implementing data sharing initiatives. The statewide HIE will also provide technical assistance to providers that connect to the exchange as part of its core services.

Is the statewide governance organization monitoring and planning for remediation of HIE as necessary throughout the state?

In an effort to mitigate variations in community HIE initiatives the MHCC, working with a wide range of stakeholders, developed the SAHIE resource guide for privacy and security and technology for use in developing data sharing initiatives. This resource guide provides a range of policy and technology guidelines that are consistent with the State Plan.

What percent of health care providers have access to broadband?

Provider access to broadband is widely distributed across the state. Presently, almost 85 percent of health care providers have access to broadband. The State Plan contains maps that illustrate the coverage area and availability of broadband as compared to physicians within the state.

What statewide shared services or other statewide technical resources are developed and implemented to address business and technical operations?

The statewide HIE will share the services related to the MPI, Record Locator Registry, and Provider Web Portal. The statewide HIE will provide technology that can be easily adapted to existing provider technology and access to a help desk service.

Legal/Policy

Has the governance organization developed and implemented privacy policies and procedures consistent with state and federal requirements?

The MHCC convened a Policy Board that provides oversight to the governance of the statewide HIE. This Policy Board is responsible for developing policies related to privacy and security, among other things. Legal counsel will review recommendations from the Policy Board to ensure that proposed policies are consistent with HIPAA and the MCMRA.

How many trust agreements have been signed?

In accordance with the Operational Plan, legal counsel has developed trust agreements for use with the statewide HIE that began implementation approximately two months ago. These trust agreements will be signed and used in the deployment of all Use Cases and reviewed periodically for any changes required to support the activities of the statewide HIE. Currently, only those providers participating in the Medication History Use Case pilot have signed trust agreements.

Do privacy policies, procedures and trust agreements incorporate provisions allowing for public health data use?

The MCMRA enables the statewide HIE to use data for public health reporting. The Policy Board will develop privacy and security policies in a manner consistent with state and federal law. Public health data use is incorporated into the trust agreements.

Performance Measures

Percent of providers participating in HIE services enabled by statewide directories or shared services.

MHCC has supplied the statewide HIE with a directory of providers in the state. Only a small number of providers from the directory participate in the Medication Use Case. The statewide HIE will use the directory in its outreach efforts. The statewide HIE will also monitor services subscribed by providers for specific Use Cases.

Percent of pharmacies serving people within the state that are actively supporting electronic prescribing and refill requests.

The statewide HIE will use information obtained from Surescripts to determine the number of pharmacies that support e-prescribing. In Maryland, the Pharmacy Board requires pharmacies to implement systems that support e-prescribing and electronic health networks are required to submit transaction data as part of their certification criteria. These sources of data will enable the statewide HIE to begin tracking the percentage of pharmacies that are actively supporting e-prescribing and refill requests.

Percent of clinical laboratories serving people within the state that are actively supporting electronic ordering and results reporting.

In Maryland, two national clinical laboratories represent the majority of the market. Both laboratories are able to support select features of electronic order entry and results reporting. Almost all hospitals have a reference laboratory that can support limited electronic ordering and results delivery. MHCC plans to work with these laboratories in the future to assess their ability to support a wide range of electronic ordering and results reporting capabilities.

Project Management

The MHCC provides guidance in managing the implementation of the State Plan and has responsibility for ensuring successful performance of the statewide HIE. The results of this project will be a functional data sharing utility that will streamline Maryland's health care industry by delivering information at the most critical time—the point of care. The statewide HIE will support value-driven health care and transform the health care system with realistic solutions to help improve quality and lower costs. Implementation of the operational plan is currently underway by CRISP, the state designated multi-stakeholder group selected to build the statewide HIE. Key positions responsible for implementation include the following roles with a brief description of the responsibilities.

President

The President oversees all of the daily operations of the organization and is ultimately responsible for implementing the private and secure HIE. The President is also responsible for implementing the State Plan in consultation with the Board of Directors. The President manages a team of employees and consultants throughout the implementation of the HIE. The President has leadership responsibility for the project and is accountable to the Board of Directors.

Program Management Office Director

The Program Management Office (PMO) Director reports to the President and is responsible for implementing the HIE technology and leading various project teams to ensure effective and efficient roll out of Use Cases. The PMO Director is a contractual position, and is responsible for monitoring the projects and preparing reports that track the performance of the statewide HIE. The PMO Director manages the communications with ONC. This role will eventually transition to the Vice President of Technology.

Director of Outreach

The Director of Outreach reports to the President and manages relationships with key stakeholders that are participating in the HIE implementation. This person is responsible for outreach to providers and consumers throughout the state and ensures that a variety of community outreach initiatives are effectively deployed to a diverse group of stakeholders. The Director of Outreach is also responsible for routine communications relating to the performance of the established objectives and required activities with stakeholders.

Clinical Assessment Manager

The Clinical Assessment Manager is responsible for providing clinical leadership related to deployment of the HIE. The Clinical Assessment Manager focuses on monitoring and reporting the impact that the statewide HIE has on current clinical workflows. This role provides direct support to providers for connecting to the HIE and reports to the President. This position has not been filled at this time.

Technical Support Lead

The Technical Support Lead (TSL) will report to the PMO Director and is responsible for addressing technical operations issues, including connectivity and performance related issues. The TSL will manage help desk operations and the employees who serve as the first point of contact for all technical issues within the network. They will track and escalate issues to the PMO as necessary to assist with monitoring HIE performance.

Monitoring and Tracking

The PMO manages multiple interrelated tasks related to implementing the statewide HIE that include: resources; time; money; and most important, scope. The PMO uses customary software applications, such as Microsoft Project, to track specific project related tasks. Key issues identified through the implementation efforts are tracked and reviewed routinely by the PMO. A response team is in place in the event that the scope of a Use Case requires change or an issue

requires immediate resolution. The PMO conducts weekly status meetings to review the progress against the operational plan. The PMO has biweekly status calls and submits monthly status reports to the MHCC. Key Use Case information is posted to the statewide HIE's website to ensure transparency.

Evaluation

The Approach

Implementing a statewide HIE is a complex project consisting of multiple systems that need to work together to ensure the success of the HIE. Many different types of evaluation tools exist and were considered for tracking the performance of the statewide HIE implementation activities. The majority of methods, techniques, and tools place particular emphasis on quantification. In an effort to accurately assess the impact of systems on systems, the statewide HIE will evaluate performance through a technique known as systems thinking. Ample evidence exists that suggests complex initiatives are better managed by the application of systems thinking. This will enable the statewide HIE to seek out new and diverse perspectives when solving problems in a manner that considers complexity, environmental influences, policy, change, and uncertainty.

Systems thinking will be used to self-evaluate the statewide HIE to determine an appropriate measurement of success with regard to implementation. As a strategic simulation tool, systems thinking evolved from a variety of tools aimed at mapping and modeling the global interaction of processes, information feedback, and policies across sectors. Viewing the statewide HIE from a very broad perspective that includes structures, patterns, and events, rather than limiting the assessment to just the events, allows for rapid detection and identification on the true cause of any issue and helps in determining specific areas that need attention to address these issues. The evaluation process will focus on input, processes, outputs, and outcomes pertaining to the implementation of the statewide HIE, and analyze select activities relating to the five domains. In general, the five domains will be evaluated on their interconnections within the statewide HIE.

The assessment will delineate how events unique to one domain affect the others and eventually the entire statewide HIE. The data will be used to balance the processes that control change and help maintain stability.

Tools

The statewide HIE will use a number of systems thinking design tools in conducting ongoing evaluations of the HIE. These tools will increase the understanding and analyses of the statewide HIE and the conditions that create or affect the interdependencies. Key assessment tools include:

- Causal loop diagrams;
- Behavior-over-time graphs;
- Systems archetypes; and
- Flow diagrams.

A combination of these tools will accurately depict a particular system or core system to the infrastructure of the statewide HIE. Systems thinking will encourage the statewide HIE to look at issues through a broad range of evaluation tools that provide a realistic measurement of performance, and to identify changes necessary to deliver sustainable and comprehensive process improvements.

Techniques

The statewide HIE will evaluate each Use Case prior to deployment and then monitor and assess the progress of implementation from a technical and operational perspective. Systems thinking will be applied to each Use Case during the implementation phase and as appropriate on an ongoing basis. The five domains enable the statewide HIE to conduct a more expansive evaluation specific to the work related to each domain. The Advisory Board is tasked with evaluating the scope of work for each domain and the evaluation results in an effort to identify process performance and policy improvements. The Advisory Board also develops any process modifications that are identified from the analysis. Policy is developed by the Policy Board, and

recommendations for modification on established policy are forwarded to the Policy Board for consideration. The statewide HIE will maintain all systems thinking evaluations as a permanent record, and is subject to annual audits by an independent reviewer. The statewide HIE is required to report on its self-evaluation activity on a monthly basis to the MHCC. Self-evaluation findings will be made available to inform a national program-level evaluation.

Evaluating ARRA Coordination

Systems thinking will serve as the framework for a consistent and comprehensive evaluation of the potential synergies in coordinating activities with other ARRA funded programs in Maryland. These potential funding programs will include the Regional Center (RC), workforce development initiatives, and broadband mapping and access. Funding received under the RC opportunity will go to the statewide HIE and evaluation will become part of its standard operating procedures. Broadband evaluation will be in coordination with the Maryland Department of Natural Resources' Office for a Sustainable Future. Coordination efforts for workforce development will occur with the Maryland Board of Regents and the Maryland Association of Community Colleges.

Organizational Capability Statement

The MHCC is an independent state regulatory agency whose mission is to plan for health system needs, promote informed decision-making, increase accountability, and improve access in a rapidly changing health care environment by providing timely and accurate information on availability, cost, and quality of services to policy makers, purchasers, providers, and the public. The MHCC's vision for Maryland is to ensure that informed consumers hold the health care system accountable and have access to affordable and appropriate health care services through programs that serve as models for the nation. The MHCC is organized around the health care systems it evaluates, regulates, or influences, bringing a wide range of tools to bear to improve quality, address costs, and increase access. The Center for Health Information Technology, one of 5 centers

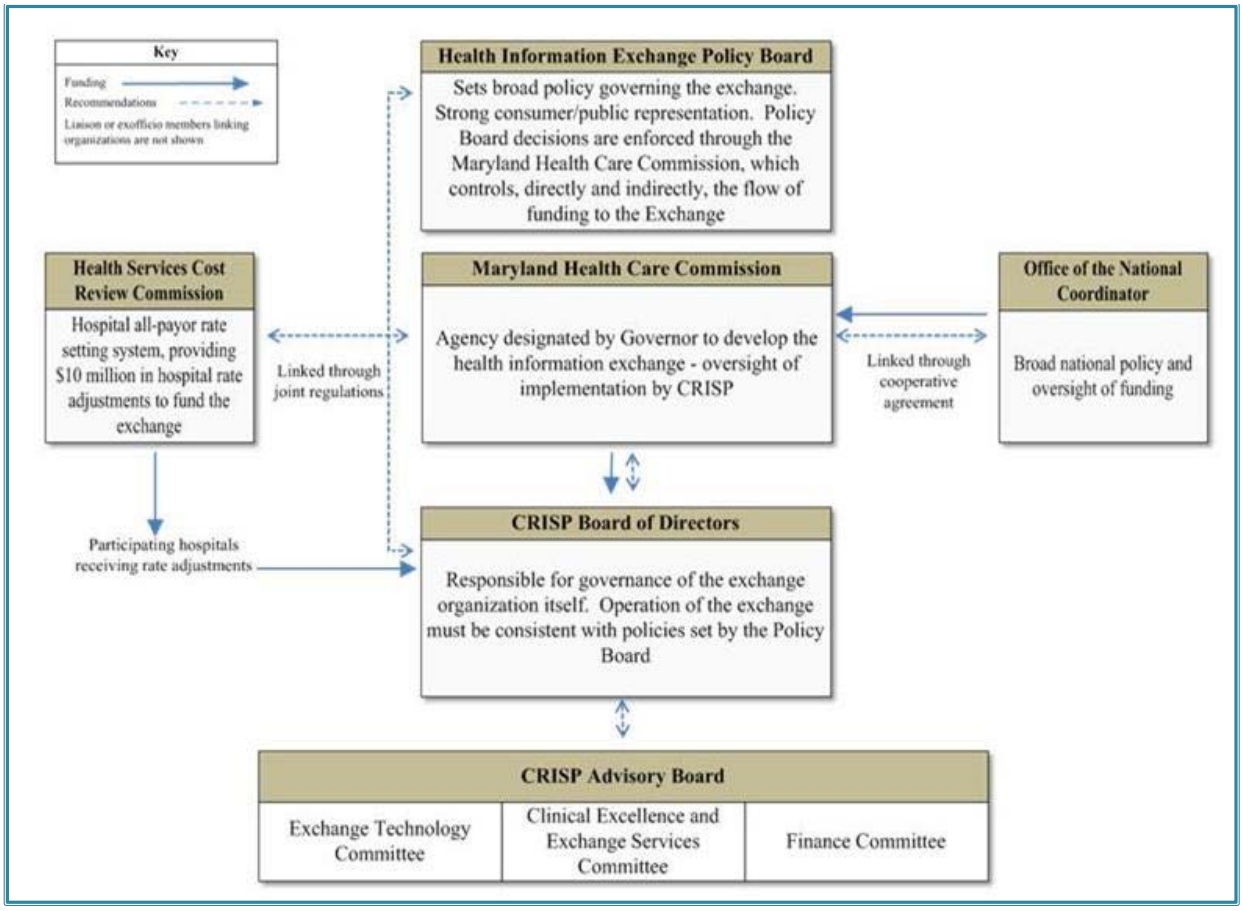
at MHCC, has responsibilities to facilitate the adoption of HIT and HIE, which impacts all sectors. The Center Director has also been designated as the state's HIT Coordinator.

Since 1974 Maryland has set hospital rates for all payers. The state legislature believed that hospitals should operate under consistent payment incentives. The statewide HIE is funded through Maryland's unique all-payor rate setting system. This mechanism provides a practical approach for distributing the cost of implementing a statewide HIE equally across all payers. After several years of planning, Maryland designated a multi-stakeholder group in August to implement the statewide HIE. This designation is for a three year period and designation beyond this timeframe is at the discretion of the MHCC. The State Plan requires revenue generation through a subscription model that will lead to sustainability of the HIE within five years. Implementation of a specific set of Use Cases, which offer services that demonstrate stakeholder value, ensures that sustainability will continue beyond the grant funding period. Additional funding through the all-payor rate setting system is an option for the development of future Use Cases.

The MHCC designated CRISP as the statewide HIE in part because of the diverse stakeholders who participate in the not-for-profit membership corporation: Johns Hopkins Medicine, MedStar Health, University of Maryland Medical System, Erickson Retirement Communities, Erickson Health Information Exchange, and the more than 25 organizations that are participating in the statewide HIE efforts (Appendix B contains the resumes for the CRISP Project Management team and Board of Directors). The CRISP participants and representatives of the multi-stakeholder group share a commitment to address HIE and HIT in the state to improve the quality of care by facilitating the delivery of the right data to the right place at the right time within the confines of appropriate privacy and security policies. Over the last several years, these individuals actively participated in planning for a statewide HIE and in policy development workgroups related to privacy and security. The planning effort resulted in the development of two comprehensive reports that addressed governance, architecture, privacy and security, access and

authentication, financing, and the establishment of a sustainable business model. Participants of the statewide HIE and other stakeholders also assisted the MHCC in developing a number of major policy reports.

Governance and Funding Relationships



Budget Narrative

Personnel

The ***Personnel*** budget is based on three full-time employees (FTEs) at the onset of the implementation: President, Director of Outreach, and Administrative Assistant. These positions will collectively total $1,433,081 over the first four years of the project. The salary totals begin at $340,000 in the first year with an annual 3.5 percent inflation increase calculated in subsequent

years. The inflation factor takes into account a standard cost of living increase for the project staff. The salary totals are $351,900 for year two, $364,217 for year three, and $376,964 for year four. The budget for all salaries is equally shared between the Federal Funds and Non-Federal Cash categories to implement the statewide HIE in Maryland.

The President is required to hold a Masters degree in business administration, health care, health administration, or equivalent, with at least five years previous executive-level technology experience in a health care organization. This position has accountability for the budget, strategic plan, and operational activities of the statewide HIE. The Director of Outreach must have a Bachelors degree (Masters preferred) with at least five years in health care management and project management experience is required. This position will execute the outreach strategy and manage stakeholder relationships. The Administrative Assistant is required to have administrative and office experience, with the ability to provide multi-faceted support in a fast-paced environment. Over the four-year cooperative agreement, Maryland will supply a conservative $560,000 with in-kind personnel contributions.

Fringe Benefits

Fringe Benefits are estimated at 25 percent of the total base salary. Over the four year cooperative agreement fringe benefits total $358,270. The figure takes into account payroll taxes and insurance. Payroll taxes account for approximately 9.55 percent and includes FICA, principal unemployment (FUTA and MUTA), and workman's compensation, which totals $136,859. Health, dental, and life insurance are around 15.45 percent of the budget and totals $221,411. Collectively, the fringe benefits are $85,000 for year one and increase proportionately at 3.5 percent with the increase in staff salaries. The budget for the project staff's fringe benefits is divided equally between the Federal Funds and Non-Federal Cash categories. The Non Federal In-Kind contributions for the *Fringe Benefits* from state employees are estimated at $140,000 for the first four years, or $35,000 per year.

Travel

The ***Travel*** expenses for the two Annual Grantee Meetings are projected at $10,800. This figure accounts for the airfare, lodging, and meal expenses for two people attending the Chicago meeting, and only meal expenses are budgeted for the Washington D.C. event since overnight accommodations are not necessary. Roundtrip airfare is estimated at $750 per person for the four meetings, which totals $6,000. Lodging was projected at $250 per night for each trip. This totals to $4,000 for two people for two nights. Per diem meal expenses are budgeted at $50 per person per day, which totals $800 for the annual meetings. The travel costs for two representatives from the statewide HIE to attend the annual meetings are divided equally among the Federal Funds and Non-Federal Cash categories.

Equipment

The budget for ***Equipment*** accounts for hardware necessary for the implementation of the statewide HIE. Equipment is estimated at a total of $1,017,704 over four years. This reflects $500,000 designated for hardware in 2010. Maintenance and part replacement is estimated at 33.33 percent of the initial hardware costs, and amounts to $166,667 per year for years two, three, and four. The total cost factors in 3.5 percent for inflation in years three and four. This amount is divided equally between the Federal Funds and Non-Federal Cash categories.

Supplies

The figure used to determine ***Supplies*** is a subset of overhead. Overhead is estimated at 10 percent, or $410,957, of the budget for both personnel and the contract resources to implement the HIE. *Supplies* include all non-rent office expenses; miscellaneous items; and other selling, general, and administrative expenses. *Supply* costs is the amount remaining after rent, utilities, communication, legal services, and liability insurance, which are accounted for in the *Other* section of the budget detail, are subtracted from total overhead. In 2010 and 2011, supplies are projected to amount to $193,957 and $192,940, respectively. Supply expenses decrease to $137,388 and

$135,757 in years three and four due to the decrease in contracted implementation resources. This amount is divided equally between the Federal Funds and Non-Federal Cash categories.

Contractual

The ***Contractual*** portion of the budget includes the core software, EMPI license, implementation contractors, and Use Case implementation costs. The core software is estimated at $1,500,000 million in 2010, $1,000,000 million in 2011, $600,000 in 2012, and $620,000 in 2013. The total figure of $3,720,000 is divided out as 50 percent of Federal Funds and 50 percent from Non-Federal Funds in years one and two, and covered 100 percent by Non-Federal Cash in years three and four. The EMPI license is projected to cost $350,000 in 2010 and $140,000 each year thereafter, which total $770,000. This infrastructure component is equally funded by Federal and Non-Federal Cash in 2010 and 2011, and 100 percent by Non-Federal funds in years three and four. The cost for the implementation of the Use Cases is budgeted at $12,956,782 over four years. This cost is broken down to $1,344,000 for 2010, $2,418,000 in 2011, $5,584,050 in 2012, and $3,610,732 in 2013. These costs are divided equally between the Federal Funds and Non-Federal Cash categories in 2010 and 2011. Federal funds needed for Use Case Implementation increases to 56 percent in 2012 and decreases to nine percent in 2013. Non-Federal Cash covers 44 percent in 2012 and 91 percent in 2013. The specific details for the contractors, including the name, scope of work, and estimated costs is not available and will be provided to ONC at a later date. Initial estimates figure that approximately 16 contact implementation resources at an average bill rate of $115 per hour will be required in 2010 and 2011, which equals $3,680,000 for each of these years. The number of contract implementation resources will decrease to eight in years three and four, which totals $1,840,000 for each of these years. The costs for the implementation resources will be budgeted with Federal funds at 53 percent in 2010 and 28 percent in 2011. Non-Federal Cash will cover 47 percent in 2010, 72 percent in 2011, and 100 percent in 2012 and 2013.

Other

The ***Other*** expenses for the budget include rent, communications, liability insurance, and legal services. In total, this portion of the budget accounts for $624,819 of the total four year budget and the costs are divided equally among Federal and Non-Federal Cash. Rent is projected at $151,738 over the four years and is based on market rates. It begins at $36,000 the first year and has a 3.5 percent increase in subsequent years. Communication includes printed materials and website maintenance to name a few examples, and is budgeted at $60,000 for years one and two based on activities in the State Plan. In year three the expense decreases to $7,500 and has a 3.5 percent increase in year four, which brings the budget estimate for this year to $7,563. Cumulatively, communication costs are approximately $135,063 over four years. Liability insurance is projected to cost $12,000 in the first year with a 3.5 percent inflation rate factored in over the four years, which brings the total of this expense to $50,579. Utilities are projected at $24,000 in year one with a 3.5 percent increase in subsequent years, over four years the total amounts to $101,159. Legal fees are higher for the first two years at $85,000, which are related to the extensive legal support required by the statewide HIE. The budget for these services will decrease to $8,000 in year three and will include a 3.5 increase in following years.

Indirect Charges

The MHCC did not include any ***Indirect Charges*** in the budget. It is not anticipated that an indirect cost rate agreement will be sought by the statewide HIE or any of its contactors during the four year cooperative agreement period.

Budget Detail – Total Project

Object Class Category	Federal Funds	Non-Federal Cash	SUBTOTAL	Non-Federal In-Kind	TOTAL	Justification	
Personnel	$ 716,540	$ 716,540	**$ 1,433,081**	$ 560,000	**$ 1,993,081**	3 FTEs, $340,000 in 2010, with a 3.5% inflation factor per year *(50/50 Federal and Non-Federal)*	$ 1,433,081
Fringe Benefits	$ 179,135	$ 179,135	**$ 358,270**	$ 140,000	**$ 498,270**	25% of salary for personnel for four years *(50/50 Federal and Non-Federal)*	
						Payroll taxes (9.55%)	$ 136,859
						FICA (7.65%)	$ 109,631
						Unemployment (1%)	$ 14,331
						Workers Comp (.9%)	$ 12,898
						Insurance (15.45%)	$ 221,411
						Health (12%)	$ 171,970
						Dental (2%)	$ 28,662
						Life (1.45%)	$ 20,780
Travel	$ 5,400	$ 5,400	**$ 10,800**	$ -	**$ 10,800**	Travel for 2 people to annual Grantee meetings *(50/50 Federal and Non-Federal)*	
						Airfare: 1 RT @ $750 x 2 people x 4 meetings	$ 6,000
						Lodging: $250/night x 2 nights x 2 people x 8 meetings	$ 4,000
						Per Diem: 2 days x 2 people x $50/day x 8 meetings	$ 800
Equipment	$ 508,852	$ 508,852	**$ 1,017,704**	$ -	**$ 1,017,704**	Hardware *(50/50 Federal and Non-Federal)*	
						Hardware	$ 500,000
						33% maintenance & part replacement per year	$ 500,000
						3.5% inflation factor per year	$ 17,704
Supplies	$ 330,021	$ 330,021	**$ 660,042**	$ -	**$ 660,042**	Non-rent miscellaneous office costs (difference from overhead minus Other) *(50/50 Federal and Non-Federal)*	
Contractual	$ 7,261,566	$ 21,225,216	**$ 28,486,782**	$ -	**$ 28,486,782**	Core Software, EMPI License, Implementation Contractors, Use Case Implementation Costs *(Federal vs. Non-Federal distributions vary each year)*	$ 28,486,782
						Core Software	
						Core software license of $1.5M in 2010, $1M in 2011, $600K in 2012, $620K in 2013	$ 3,720,000
						EMPI License	
						EMPI license of $350K in 2010, and $140K each year thereafter	$ 770,000
						Implementation Contractors	
						16 Contract Implementation Resources in 2010 and 2011 with and 8 contract implementation resources in 2012 and 2013 with an average bill rate of $115/hr	$ 11,040,000
						Use Case Implementation Costs	
						Implementation and software costs for individual Use Cases	$ 12,956,782
Other	$ 312,409	$ 312,409	**$ 624,819**	$ -	**$ 624,819**	Rent, communications, insurance, utilities, and legal fees *(50/50 Federal and Non-Federal)*	
						Rent	$ 151,738
						Communications	$ 135,063
						Liability Insurance	$ 50,579
						Utilities	$ 101,159
						Legal	$ 186,280
Indirect Charges	$ -	$ -	$ -	$ -	$ -	No Indirect Charges Apply	
TOTAL	**$ 9,313,924**	**$ 23,277,574**	**$ 32,591,498**	**$ 700,000**	**$ 33,291,498**		

Budget Detail – Year 1

Object Class Category	Federal Funds	Non-Federal Cash	SUBTOTAL	Non-Federal In-Kind	TOTAL	Justification	
Personnel	$ 170,000	$ 170,000	**$ 340,000**	$ 140,000	**$ 480,000**	3 FTEs, $340,000 in 2010, with a 3.5% inflation factor per year *(50/50 Federal and Non-Federal)*	$ 340,000
Fringe Benefits	$ 42,500	$ 42,500	**$ 85,000**	$ 35,000	**$ 120,000**	25% of combined base salary for personnel *(50/50 Federal and Non-Federal)*	
						Payroll taxes (9.55%)	$ 32,470
						FICA (7.65%)	$ 26,010
						Unemployment (1%)	$ 3,400
						Workers Comp (.9%)	$ 3,060
						Insurance (15.45%)	$ 52,530
						Health (12%)	$ 40,800
						Dental (2%)	$ 6,800
						Life (1.45%)	$ 4,930
Travel	$ 1,350	$ 1,350	**$ 2,700**	$ -	**$ 2,700**	Travel for 2 people to annual Grantee meetings *(50/50 Federal and Non-Federal)*	
						Airfare: 1 RT @ $750 x 2 people x 1 meeting	$ 1,500
						Lodging: $250/night x 2 nights x 2 people x 1 meeting	$ 1,000
						Per Diem: 2 days x 2 people x $50/day x 2 meetings	$ 200
Equipment	$ 250,000	$ 250,000	**$ 500,000**	$ -	**$ 500,000**	Hardware *(50/50 Federal and Non-Federal)*	
						Hardware	$ 500,000
						33% maintenance & part replacement per year	$ -
						3.5% inflation factor per year	$ -
Supplies	$ 96,978	$ 96,978	**$ 193,957**	$ -	**$ 193,957**	Non-rent miscellaneous office costs (difference from overhead minus Other) *(50/50 Federal and Non-Federal)*	
Contractual	$ 2,580,672	$ 4,293,328	**$ 6,874,000**	$ -	**$ 6,874,000**	Core Software, EMPI License, Implementation Contractors, Use Case Implementation Costs *(Federal vs. Non-Federal distributions vary each year)*	$ 6,874,000
						Core Software *(50/50 Federal and Non-Federal)*	
						Core software license	$ 1,500,000
						EMPI License *(50/50 Federal and Non-Federal)*	
						EMPI license	$ 350,000
						Implementation Contractors *(53% Federal and 47% Non-Federal)*	
						16 Contract Implementation Resources average $115/hr	$ 3,680,000
						Use Case Implementation Costs *(50/50 Federal and Non-Federal)*	
						Implementation and software costs for individual use cases	$ 1,344,000
Other	$ 108,500	$ 108,500	**$ 217,000**	$ -	**$ 217,000**	Rent, communications, insurance, utilities, and legal fees *(50/50 Federal and Non-Federal)*	
						Rent	$ 36,000
						Communications	$ 60,000
						Insurance	$ 12,000
						Utilities	$ 24,000
						Legal	$ 85,000
Indirect Charges	$ -	$ -	$ -	$ -	$ -	No Indirect Charges Apply	
TOTAL	**$ 3,250,000**	**$ 4,962,656**	**$ 8,212,657**	**$ 175,000**	**$ 8,387,657**		

Budget Detail – Year 2

Object Class Category	Federal Funds	Non-Federal Cash	SUBTOTAL	Non-Federal In-Kind	TOTAL	Justification	
Personnel	$ 175,950	$ 175,950	**$ 351,900**	$ 140,000	**$ 491,900**	3 FTEs, $351,900 in 2011 *(50/50 Federal and Non-Federal)*	$ 351,900
Fringe Benefits	$ 43,988	$ 43,988	**$ 87,975**	$ 35,000	**$ 122,975**	25% of combined base salary for personnel *(50/50 Federal and Non-Federal)*	
						Payroll taxes (9.55%)	$ 33,606
						FICA (7.65%)	$ 26,920
						Unemployment (1%)	$ 3,519
						Workers Comp (.9%)	$ 3,167
						Insurance (15.45%)	$ 54,369
						Health (12%)	$ 42,228
						Dental (2%)	$ 7,038
						Life (1.45%)	$ 5,103
Travel	$ 1,350	$ 1,350	**$ 2,700**	$ -	**$ 2,700**	Travel for 2 people to annual Grantee meetings *(50/50 Federal and Non-Federal)*	
						Airfare: 1 RT @ $750 x 2 people x 1 meeting	$ 1,500
						Lodging: $250/night x 2 nights x 2 people x 1 meeting	$ 1,000
						Per Diem: 2 days x 2 people x $50/day x 2 meetings	$ 200
Equipment	$ 83,333	$ 83,333	**$ 166,667**	$ -	**$ 166,667**	Hardware *(50/50 Federal and Non-Federal)*	
						Hardware	$ -
						33% maintenance & part replacement per year	$ 166,667
						3.5% inflation factor per year	$ -
Supplies	$ 96,470	$ 96,470	**$ 192,940**	$ -	**$ 192,940**	Non-rent miscellaneous office costs (difference from overhead minus Other) *(50/50 Federal and Non-Federal)*	
Contractual	$ 2,803,073	$ 4,434,927	**$ 7,238,000**	$ -	**$ 7,238,000**	Core Software, EMPI License, Implementation Contractors, Use Case Implementation Costs *(Federal vs. Non-Federal distributions vary each year)*	$ 7,238,000
						Core Software *(50/50 Federal and Non-Federal)*	
						Core software license	$ 1,000,000
						EMPI License *(50/50 Federal and Non-Federal)*	
						EMPI license	$ 140,000
						Implementation Contractors *(28% Federal and 72% Non-Federal)*	
						16 Contract Implementation Resources average $115/hr	$ 3,680,000
						Use Case Implementation Costs *(50/50 Federal and Non-Federal)*	
						Implementation and software costs for individual use cases	$ 2,418,000
Other	$ 109,760	$ 109,760	**$ 219,520**	$ -	**$ 219,520**	Rent, communications, insurance, utilities, and legal fees *(50/50 Federal and Non-Federal)*	
						Rent	$ 37,260
						Communications	$ 60,000
						Insurance	$ 12,420
						Utilities	$ 24,840
						Legal	$ 85,000
Indirect Charges	$ -	$ -	$ -	$ -	$ -	No Indirect Charges Apply	
TOTAL	**$ 3,313,924**	**$ 4,945,778**	**$ 8,259,702**	**$ 175,000**	**$ 8,434,702**		

Budget Detail – Year 3

Object Class Category	Federal Funds	Non-Federal Cash	SUBTOTAL	Non-Federal In-Kind	TOTAL	Justification	
Personnel	$ 182,108	$ 182,108	**$ 364,217**	$ 140,000	**$ 504,217**	3 FTEs, $364,217 in 2012 *(50/50 Federal and Non-Federal)*	$ 364,217
Fringe Benefits	$ 45,527	$ 45,527	**$ 91,054**	$ 35,000	**$ 126,054**	25% of combined base salary for personnel *(50/50 Federal and Non-Federal)*	
						Payroll taxes (9.55%)	$ 34,783
						FICA (7.65%)	$ 27,863
						Unemployment (1%)	$ 3,642
						Workers Comp (.9%)	$ 3,278
						Insurance (15.45%)	$ 56,271
						Health (12%)	$ 43,706
						Dental (2%)	$ 7,284
						Life (1.45%)	$ 5,281
Travel	$ 1,350	$ 1,350	**$ 2,700**	$ -	**$ 2,700**	Travel for 2 people to annual Grantee meetings *(50/50 Federal and Non-Federal)*	
						Airfare: 1 RT @ $750 x 2 people x 1 meeting	$ 1,500
						Lodging: $250/night x 2 nights x 2 people x 1 meeting	$ 1,000
						Per Diem: 2 days x 2 people x $50/day x 2 meetings	$ 200
Equipment	$ 86,250	$ 86,250	**$ 172,500**	$ -	**$ 172,500**	Hardware *(50/50 Federal and Non-Federal)*	
						Hardware	$ -
						33% maintenance & part replacement per year	$ 166,667
						3.5% inflation factor per year	$ 5,833
Supplies	$ 68,694	$ 68,694	**$ 137,388**	$ -	**$ 137,388**	Non-rent miscellaneous office costs (difference from overhead minus Other) *(50/50 Federal and Non-Federal)*	
Contractual	$ 1,569,757	$ 6,594,293	**$ 8,164,050**	$ -	**$ -**	Core Software, EMPI License, Implementation Contractors, Use Case Implementation Costs *(Federal vs. Non-Federal distributions vary each year)*	$ 8,164,050
						Core Software *(100% Non-Federal)*	
						Core software license	$ 600,000
						EMPI License *(100% Non-Federal)*	
						EMPI license	$ 140,000
						Implementation Contractors *(100% Non-Federal)*	
						8 Contract Implementation Resources average $115/hr	$ 1,840,000
						Use Case Implementation Costs *(56% Federal and 44% Non-Federal)*	
						Implementation and software costs for individual use cases	$ 5,584,050
Other	$ 46,314	$ 46,314	**$ 92,628**	$ -	**$ 92,628**	Rent, communications, insurance, utilities, and legal fees *(50/50 Federal and Non-Federal)*	
						Rent	$ 38,564
						Communications	$ 7,500
						Insurance	$ 12,855
						Utilities	$ 25,709
						Legal	$ 8,000
Indirect Charges	$ -	$ -	$ -	$ -	$ -	No Indirect Charges Apply	
TOTAL	**$ 2,000,000**	**$ 7,024,536**	**$ 9,024,537**	**$ 175,000**	**$ 1,035,487**		

Budget Detail – Year 4

Object Class Category	Federal Funds	Non-Federal Cash	SUBTOTAL	Non-Federal In-Kind	TOTAL	Justification	
Personnel	$ 188,482	$ 188,482	**$ 376,964**	$ 140,000	**$ 516,964**	3 FTEs, $376,964 in 2013 *(50/50 Federal and Non-Federal)*	$ 376,964
Fringe Benefits	$ 47,121	$ 47,121	**$ 94,241**	$ 35,000	**$ 129,241**	25% of combined base salary for personnel *(50/50 Federal and Non-Federal)*	
						Payroll taxes (9.55%)	$ 36,000
						FICA (7.65%)	$ 28,838
						Unemployment (1%)	$ 3,770
						Workers Comp (.9%)	$ 3,393
						Insurance (15.45%)	$ 58,241
						Health (12%)	$ 45,236
						Dental (2%)	$ 7,539
						Life (1.45%)	$ 5,466
Travel	$ 1,350	$ 1,350	**$ 2,700**	$ -	**$ 2,700**	Travel for 2 people to annual Grantee meetings *(50/50 Federal and Non-Federal)*	
						Airfare: 1 RT @ $750 x 2 people x 1 meeting	$ 1,500
						Lodging: $250/night x 2 nights x 2 people x 1 meeting	$ 1,000
						Per Diem: 2 days x 2 people x $50/day x 2 meetings	$ 200
Equipment	$ 89,269	$ 89,269	**$ 178,538**	$ -	**$ 178,538**	Hardware *(50/50 Federal and Non-Federal)*	
						Hardware	$ -
						33% maintenance & part replacement per year	$ 166,667
						3.5% inflation factor per year	$ 11,871
Supplies	$ 67,878	$ 67,878	**$ 135,757**	$ -	**$ 135,757**	Non-rent miscellaneous office costs (difference from overhead minus Other) *(50/50 Federal and Non-Federal)*	
Contractual	$ 308,065	$ 5,902,667	**$ 6,210,732**	$ -	**$ -**	Core Software, EMPI License, Implementation Contractors, Use Case Implementation Costs *(Federal vs. Non-Federal distributions vary each year)*	$ 6,210,732
						Core Software *(100% Non-Federal)*	
						Core software license	$ 620,000
						EMPI License *(100% Non-Federal)*	
						EMPI license	$ 140,000
						Implementation Contractors *(100% Non-Federal)*	
						8 Contract Implementation Resources average $115/hr	$ 1,840,000
						Use Case Implementation Costs *(9% Federal and 91% Non-Federal)*	
						Implementation and software costs for individual use cases	$ 3,610,732
Other	$ 47,835	$ 47,835	**$ 95,671**	$ -	**$ 95,671**	Rent, communications, insurance, utilities, and legal fees *(50/50 Federal and Non-Federal)*	
						Rent	$ 39,914
						Communications	$ 7,563
						Insurance	$ 13,305
						Utilities	$ 26,609
						Legal	$ 8,280
Indirect Charges	$ -	$ -	$ -	$ -	$ -	No Indirect Charges Apply	
TOTAL	**$ 750,000**	**$ 6,344,602**	**$ 7,094,602**	**$ 175,000**	**$ 1,058,870**		

Appendix A: Self-Assessment

Strategic Plan Guidance State Self-Assessment

Strategic Plan Guidance	Status		
1. a) General Requirements	No Plan	Inconsistent	Consistent
Environmental Scan			
☐ Assess readiness for HIE implementation statewide			X
☐ Identify current HIE capacities that can be expanded or leveraged:			X
→ Available HIT resources			x
→ Relevant collaborative opportunities			x
→ Human capital			x
→ Other			x
HIE Development & Adoption			
☐ Define the vision, goals, objectives & strategies for achieving HIE capacity and use			X
→ All health care providers in the state			x
→ To meet meaningful use criteria**			x
→ Address continuous improvement in care coordination, health care quality & efficiency			x
→ Address HIE among *providers, public health*, those offering *services for patient engagement & access*			x
HIT Adoption *(Encouraged but Not Required)*			
☐ How HIT adoption will be advanced as part of the statewide plan to achieve connectivity			X
→ Address comprehensive approach, planning for how to achieve connectivity across the state			x
Medicaid Coordination			
☐ Interdependencies and integration of efforts between state's Medicaid HIT Plan and statewide HIE development.			X
→ How State's HIE-related requirements for meaningful use will align with those established by Secretary			x
→ Mechanisms for state measuring provider participation in HIE			x
Coordination of Medicare and Federally Funded, State-Based Programs			
☐ Activities to coordinate with Medicare and relevant federally-funded state programs (see Funding Opportunity Announcement pages 51-52 for complete list)			X
Participation with Federal Care Delivery Organizations (encouraged, but optional)			
☐ Describe extent to which federal care delivery organizations will participate in state HIE related activities including but not limited to VA, DoD, HIS.			X
Coordination with Other ARRA Programs			
☐ Describe coordination mechanisms with other relevant ARRA programs (in conjunction with ONC program guidance)			X
☐ Specify how:			
→ **REC entities**/collaboratives will provide technical assistance to health care providers in their states			x
→ Trained professionals from **workforce development programs** will be used to support statewide HIE			x
→ How **broadband access expansion programs** will inform State Strategic and Operational Plans			x

Strategic Plan Guidance	Status		
1. b) Domain Requirements	No Plan	Inconsistent	Consistent
Governance			
☐ **Collaborative Governance Model** → Describe multi-disciplinary, multi-stakeholder governance entity ✓ Governance model ✓ Membership ✓ Decision-making authority ✓ Governance model alignment w/nationwide governance			X x x x x
☐ **State Government HIT Coordinator** → Identify the Coordinator → Describe how the Coordinator will interact with federally funded state health programs and HIE activities within the state			X X
☐ **Accountability and Transparency** → Identify how the state is going to address HIE accountability and transparency to ensure that HIE is pursued in the public's interest			X
Finance			
☐ **Sustainability** → Business plan enabling financial sustainability of governance and operations by the project's end			X
Technical Infrastructure			
☐ **Interoperability** → HIE services include NHIN participation → Address use of appropriate HHS adopted standards & HIE certifications especially accounting for meaningful use criteria *(to be established through rule making)*			X X
☐ **Technical Architecture/Approach (Encouraged, not required if State or SDE is not implementing HIE)** → Outline data and technical architectures → Describe approach, including HIE services			 X X
Business and Technical Operations			
☐ **Meeting Meaningful Use Requirements** → Strategy for developing HIE capacity to meet meaningful use requirements			X
☐ **Plans to leverage resources** → Existing state & regional capacity → Statewide shared services and directories			X X
☐ **Incremental approach for HIE services** → To reach all geographies and providers			X
☐ **NHIN participation** → Address if/when state HIE infrastructure will participate in NHIN.			X
Legal/Policy			
☐ **Privacy and Security issues** → Within and between states → Relationship to federal and state laws/regulations → Adherence to privacy principles in HHS Privacy/Security Framework; related guidance			X X X
☐ **State Laws** → Plans to analyze/modify state laws → Communications/negotiations with other states			X X
☐ **Policies and Procedures** → Development of policies & procedures for HIE within and between states			X
☐ **Trust Agreements** → HIE related trust agreements ✓ Data sharing agreements ✓ Data use agreements ✓ Reciprocal support agreements			X x x x
☐ **Oversight of Information Exchange and Enforcement** → How state will address issues of noncompliance ✓ Federal and state laws ✓ Policies applicable to HIE			X x x

Operational Plan Guidance State Self-Assessment

Operation Plan Guidance	Status		
2. a) General Requirements	No Plan	Inconsistent	Consistent
Coordination with ARRA Programs			
☐ **Coordination and interdependencies** → Describe specific points of coordination and interdependencies with relevant ARRA programs ✓ Regional Center ✓ Workforce development initiatives ✓ Broadband mapping and access			X x x x
☐ **If applying as HIE and REC recipients** → Specify how technical assistance will be provided to health care providers in the state → Provide estimates of geographic and provider coverage			N/A
☐ **Project resource planning** → How and when trained professionals from workforce development programs will be used to support statewide HIE → How and when broadband will be available to providers across the state according to current broadband maps and funded access efforts.			X X
Coordination with Other States			
☐ **Describe coordination activities** → Include sharing of plans between states			X

Operational Plan Guidance	Status		
2. b) Domain Requirements	No Plan	Inconsistent	Consistent
Governance and Policy Structures			
Ongoing development			
→ Describe the ongoing development of the governance and policy structures.			X
Finance			
Cost Estimates and Staffing Plans			
→ Detailed cost estimate for implementing Strategic Plan over time-frame covered by Operational Plan			X
→ Detailed schedule/description of tasks, subtasks			X
✓ Resources			x
✓ Dependencies			x
✓ Specific timeframes			x
→ Proposed mitigation methods for issues and risks			X
✓ Staffing plans			x
Controls and Reporting			
→ Financial policies, procedures, controls compliant with GAAP and relevant OMB circulars.			X
→ Submit progress and spending reports to ONC			X
Technical Infrastructure			
Standards and Certifications			
→ **Beginning projects**: plans for consistency with HHS interoperability standards, certification requirements			X
→ **Projects implemented or under implementation**: demonstrated compliance or plans for consistency with HHS adopted interoperability standards and certifications.			X
Technical Architecture			
→ Supporting statewide availability of HIE			X
✓ among healthcare providers,			x
✓ public health,			x
✓ those offering services for patient engagement and access.			x
→ Plans for protection of health data			X
→ Reflect business and clinical requirements			X
✓ Multi-stakeholder planning process			x
✓ Architecture aligns with NHIN core services			x
✓ Federal health care providers			x
Technology Deployment			
→ Describe technical solutions			X
✓ For HIE capacity in the state			x
✓ Enable meaningful use criteria for 2011			x
✓ For nationwide health information exchange			x
→ If planning on participating in NHIN			X
✓ Compliance with HHS adopted standards and implementation specifications			x
Business and Technical Operations			
Current HIE Capacities			
→ How current HIE capacities will be leveraged			X
→ HIOs intra and interstate/regional			X
State-level Shared Services and Repositories			
→ Plans for leveraging state-level shared services			X
✓ with HIOs			x
✓ other exchange mechanisms			x
✓ public and private			x
→ Identify shared services that may be developed:			X
✓ Security service			TBD
✓ Patient locator service			x
✓ Data/document locator service			x
✓ Terminology service			x
Standard Operating Procedures for HIE *(encouraged, not required)*			
→ Explain how SOPs and processes for HIE services will be developed and implemented			X

Legal/Policy			
Establish requirements			
→ Plan to ensure Statewide Compliance			X
✓ Federal & state legal and policy requirements			x
✓ Mechanisms for developing, evolving, implementing policy requirements			x
✓ Interdependence with governance and oversight mechanisms to ensure compliance with policies.			x
Privacy and Security Harmonization and Compliance			
→ Plans for statewide			X
→ Coordination activities for consistency interstate			X
Federal Requirements			
→ HIE with federal care delivery organizations			X
→ If so, federal requirements for utilization and protection of health data incorporated			X

Appendix B: Resumes

Program Management Team

David Horrocks, CRISP President

Prior to joining CRISP, David Horrocks was Senior Vice President for EMR Initiatives in the Developing Enterprises division of Erickson Retirement Communities. David was responsible for the organization's several startup ventures seeking to promote electronic medical records and health information exchange. David also served at Retirement Living TV, a startup television network for seniors currently in 30 million homes, where he was responsible for IT, HR, business process improvement, and the network's web presence.

David previously served four years as Chief Information Officer for Erickson Retirement Communities, during which time he led the effort to deploy Centricity EMR to all of Erickson's primary care providers. He subsequently extended electronic medical records to Erickson's eight Skilled Nursing facilities and Rehab departments. David spent much of 2006 in a management rotation as the Associate Executive Director of Charlestown Community in Baltimore, which is home to 2,500 seniors. Prior to joining Erickson, David was with Visalign, an IT consulting firm, where he focused on infrastructure technology and economic analysis of IT projects. He also spent five years as a technologist and department manager for AbiliTech, a nonprofit company providing technology services to people with disabilities.

David holds a B.S. in Engineering from the University of Pennsylvania and an M.B.A. from the Wharton School of Business. The CRISP President also serves on the Board of Directors.

Scott Afzal, Project Manager

Scott serves as the Director of Health Information Systems for Audacious Inquiry and the Project Director for CRISP. He brings project management and systems integration expertise to CRISP, and has been deeply involved in the HIE planning activities that have taken place in Maryland over the last two years. Scott has also led the development of networked consumer health

applications designed to give consumers access to and control over their own clinical health information. Scott's responsibilities also include establishing strategies for AI's growth in the health information technology industry.

Prior to joining Audacious Inquiry, Scott served as a Business and Systems Integration Consultant with Accenture, Inc out of their New York City office. Scott's clients while at Accenture include large education and healthcare clients in the New York City and State of Texas governments. Scott holds a BSBA in business management from Bucknell University.

Mike Fierro, Technical Support Lead (Alternate Project Manager)

Mike Fierro is a principal of Dynamed Solutions, a technical service, staffing, and consulting firm serving the healthcare industry. Dynamed's primary focus is the integration of disparate systems within healthcare to enable RHIO/HIE efforts and identify new possibilities in information application. Mike has helped design and lead several RHIO efforts, and has experience in the full life cycle of these efforts, including stakeholder involvement, legislative processes, technical infrastructure and business case development.

Mike served on the leadership committee of the board of directors of the MD/DC Collaborative for Healthcare Information Technology for two years, and is currently serving on the leadership committee of an HIE effort for Johns Hopkins Medicine.

Prior to joining Dynamed, Mike was the Associate Vice President for Healthcare Informatics at CareFirst BlueCross BlueShield. In this position, Mike oversaw CareFirst's efforts in clinical decision support, predictive modeling, statistical analysis, provider profiling, care trend analysis, account reporting, and medical data systems. His role was to leverage CareFirst's large data stores into a competitive advantage through a better understanding of what's driving the utilization patterns and cost trends for members, providers, and employer groups. Mike spent 11 years at CareFirst.

Prior to working at CareFirst, Mike held various healthcare analytic and data warehousing positions at Johns Hopkins Health Plan, Prudential Health Care Plan, and Chesapeake Health Plan. Mike received a BS degree in Finance from Villanova University.

Cheryl Jones, Director of Outreach

Cheryl Jones joins CRISP with more than eight years experience in the clinical and operational aspects of the healthcare industry. Prior to joining CRISP, Cheryl was employed by Erickson Retirement Communities. Her roles included serving as a Six Sigma internal consultant and a Senior Business Analyst, reporting to the executive team. Cheryl was also responsible for the administrative management of the 170-bed skilled nursing and assisted living facility at one of Erickson's largest campuses.

Earlier in her career, Cheryl spent nearly two years as a healthcare consultant with BearingPoint (now Deloitte). She completed projects at several hospitals across the United States, focusing on revenue cycle optimization and other financial issues. Serving as a BearingPoint consultant, Cheryl was instrumental in assisting the CDC with the Hurricane Katrina After Action Report.

Cheryl holds a B.A. in Psychology from Spelman College and an M.B.A. and M.H.A. from the University of Florida. She has a background in human resources and has received her P.H.R. certification.

Board of Directors

Catherine Szenczy – MedStar

As MedStar Health's Senior Vice President and Chief Information Officer (CIO), Catherine Szenczy oversees information technology, information systems and clinical informatics across the system. Szenczy has more than 30 years of experience in healthcare information systems, and has served as a CIO for the past 16 years in both academic settings and integrated delivery systems. Szenczy held CIO positions at St. Francis Care in Hartford, Conn., SUNY Health Science Center in

Syracuse, New York, and University Hospital at Stony Brook., Stony Brook, New York. She also held positions within IS at Long Island Jewish Medical Center, Crouse Irving Memorial Hospital and St. Joseph's Hospital. She has published articles in the Journal of Health Information Management, lectured on health information technology, and served on the boards of several non-profit organizations. Szenczy received her B.A. in business management at State University of New York Empire State College, and earned her master's degree in human resources administration and labor relations at State University of New York at Stony Brook.

Dr. John Parrish – The Erickson Foundation

John M. Parrish, Ph.D., M.B.A., C.N.P.S., is the Executive Director of The Erickson Foundation, a private operating foundation that engages in research as well as philanthropy. The Erickson Foundation was established in 1998 by John C. Erickson and his family. John C. Erickson is the Founder and Chairman of Erickson Retirement Communities, LLC. Under Dr. Parrish's leadership, The Erickson Foundation invests in innovative research and development projects, shares research findings and their implications for evidenced-based practice, and actively enables local adoption, or adaptation, of demonstrated results. In alignment with current best practices in vital aging, The Erickson Foundation pursues the following strategic priorities: 1) understanding the strengths, capacities, and preferences, as well as needs of older adults who seek an active lifestyle in senior living communities; and 2) encouraging healthy choice-making by these adults and their families, thereby striving to preserve, possibly enhance, the wellness of mature adults while extending their health span. Original studies have been completed, or are underway, in programmatic lines of inquiry including but not limited to: longitudinal changes in health and social status, utilization of health services, and choice-making; longitudinal changes in wellness and correlation of successful aging among adults systematically screened for wellness; falls and fractures risk reduction via screening, education, and referral; benefits of walking; bone health screening; ergonomics in long-term care settings; and neurobics for brain health. The Erickson Foundation is demonstrating the

value of a core research laboratory and resource center positioned in a senior living community. Recently, The Erickson Foundation has funded the development of the Erickson School of Aging Studies at the University of Maryland, Baltimore County. Prior to serving as Executive Director of The Erickson Foundation, John M. Parrish held faculty appointments at the Johns Hopkins University School of Medicine, the University of Pennsylvania School of Medicine, and the University of Maryland School of Medicine.

Dr. Mark Kelemen - UMMS

Mark Kelemen MD, MBA, MSc. joined the University of Maryland Medical System as its first CMIO in 2007 to facilitate the successful adoption of leading edge clinical information technology. He most recently served as the director of Clinical Cardiology at the University of Maryland Medical Center and remains active on the medical staff. He is an Associate Professor of Medicine at the University of Maryland School of Medicine. Dr. Kelemen grew up in Columbia, Md., and attended Brown University and the Johns Hopkins School of Medicine. He trained in internal medicine at Duke University and in cardiology at the Johns Hopkins Hospital. He received a Master of Science degree from the Johns Hopkins School of Public Health in Clinical Investigation and an MBA in Medical Services Management, also from Johns Hopkins. He served on the faculty of the Johns Hopkins School of Medicine for seven years before joining the University of Maryland in 2002. He has written more than 30 scientific articles, has served on state commissions on cardiovascular care and has helped develop national guidelines for in-hospital management of hyperglycemia. He is a fellow of the American College of Cardiology.

Dr. Matt Narrett – Erickson Retirement Communities, LLC

Dr. Narrett is the Executive Vice President and Chief Medical Officer for Erickson Retirement Communities. He is responsible for directing the provision of medical care at all Erickson communities. The Medical Centers that Dr. Narrett directs at Erickson communities are recognized as America's leading geriatric health care facilities. Prior to his current position, he

served as Erickson's Vice President and Regional Medical Director, as well as Medical Director for Charlestown. Before joining Erickson, he was in private practice in Derry, New Hampshire, where he served as director of medical quality assurance. Dr. Narrett holds a B.S. in molecular biochemistry and biophysics; he graduated summa cum laude from Yale University. He received his medical degree from Harvard Medical School, Harvard-M.I.T. Division of Health Sciences and Technology. He completed his internship and residency at Beth Israel Hospital in Boston. He is board certified in internal medicine and holds a certificate of added qualifications in geriatric medicine. Dr. Narrett is a member of the American College of Physicians and the American Geriatrics Society.

Dr. Peter Basch – MedStar

Dr. Basch practices internal medicine in Washington, DC, and is the Medical Director for eHealth at MedStar Health. He is a frequent speaker, author, and expert panelist on such topics as EHRs, interconnectivity, the transformation of health care through HIT, and the necessity of creating a sustainable business case for information management and quality. Dr. Basch is currently chairman of the Maryland Task Force on EHRs and co-chair of the Physicians' EHR Coalition. Dr. Basch is a board member of the eHealth Initiative, the Delmarva Foundation, and the Maryland-DC Collaborative for HIT. He is a member of the American College of Physician's Medical Informatics and Performance Measures Subcommittees, and their Medical Services Committee. Dr. Basch also serves on the Advisory Committees to the Doctor's Office Quality Information Technology (DOQ-IT) Projects for both DC and Maryland, and on the Health Information Technology Advisory Panel to the Joint Commission.

Jon Burns – UMMS

Jon Burns is Senior Vice President and Chief Information Officer for the University of Maryland Medical System. He is responsible for all information technology services and strategies across the eight hospital system. Mr. Burns has over 25 years experience in the health care

industry in the not-for-profit provider sector. Prior to joining UMMS in May of 2006, Mr. Burns was Senior Executive of Information Technology for the Cleveland Clinic Health System. Mr. Burns was also responsible for technology support to the Cleveland Clinic Lerner College of Medicine and a number of emerging technologies initiatives across the Cleveland Clinic Health System. He served as the Chief Technology Officer of eCleveland Clinic, an INTERNET based care delivery model. Prior to joining Cleveland Clinic in 1998, he was Vice President and CIO for Forum Health, a four-hospital teaching organization based in Northeast Ohio. Mr. Burns also has served in a number of senior level financial and operational positions at UNC Hospitals, Chapel Hill, NC, and the Geisinger Health System in Danville, Pennsylvania. While at UNC, he was appointed as Faculty Associate at UNC's School of Public Health's-Department of Health Policy and Administration.

Mark Erickson – The Erickson Foundation

Mark Erickson is the Chief Operating Officer/President of Health and Operations for Erickson Retirement Communities with responsibility for the operations and development of the core senior housing business. He oversees the operations of a billion-dollar business that serves over 22,000 seniors and 11,000 employees at 18 continuing care retirement communities across the country. Previously Mark served as the Chief Strategy Officer with responsibility for Strategy and Business Process Improvement, as well as several administrative functions including Government and Community Relations, Human Resources, Information Technology, Procurement, and Compliance. From 2002 through 2005 Mark served as Executive Director and Associate Executive Director at Oak Crest, a 1,500-unit continuing care retirement community that serves 2,000 seniors in Parkville, Maryland. Before re-joining Erickson in 2000, Mark spent five years with American Express Consulting Services based in Europe and Asia. He completed a Bachelor of Arts in English literature at Vanderbilt University and earned an M.B.A. from the Wharton School at University of Pennsylvania. Currently Mark serves as a board member or trustee for the following

organizations: the Institute of Notre Dame, Leadership Baltimore County, the executive committee of the American Senior Housing Association, and Catholic Charities.

Patricia Brown – Johns Hopkins

Patricia (Patty) Brown is President of Johns Hopkins Healthcare, LLC, President of Johns Hopkins Employer Health Program, Inc and Senior Counsel for Johns Hopkins Health System. She is responsible for managing 500+ employee managed care organization (MCO) and third party administrator (TPA), including 115,000 members of a Medicaid MCO, 45,000 members of a self funded Employee Retirement Income Security Act (ERISA) plans, 25,000 commercial and other plans, and over $700 million in annual revenue. She provides oversight and direction to all MCO functions, including claims payment, customer service, client service, care management, disease management, and finance. Ms. Brown is responsible for developing, integrating and coordinating managed care contracting and payor strategy for all Johns Hopkins Medicine entities, including The Johns Hopkins Hospital, The Johns Hopkins Bayview Medical Center, Howard County General Hospital, The Johns Hopkins University School of Medicine, the Johns Hopkins Community Physicians and the Johns Hopkins specialty and primary care networks. She is also responsible for providing legal advice regarding managed care contracting, reimbursement issues, Medicare and Medicaid participation, certificate of need, and other regulatory matters. Prior to Ms. Brown's current position, she held many posts within Johns Hopkins beginning in 1994. Ms. Brown received her Bachelor of Arts from University of Richmond in Political Science and Sociology/Anthropology with Magna Cum Laude honors, and she received her Juris Doctorate from the University of Baltimore.

Stephanie Reel – Johns Hopkins

Stephanie L. Reel has been vice provost for information technology and Chief information Officer for The Johns Hopkins University since January 1999. She is also vice president for information services for Johns Hopkins Medicine, a post she has held since 1994. As CIO for all

divisions of the Johns Hopkins University and Health System, Ms. Reel leads the implementation of the strategic plan and operational redesign for information services, networking, telecommunications, as well as clinical, research and instructional technologies. She is now working with other leaders toward a regional electronic patient record. Ms. Reel is involved in several other Web-based development initiatives across the university, such as: a university-wide internet student information system (ISIS) to provide easy access for students about admissions status, financial aid, registration, grades, student accounts, procurement support systems, and an Enterprise Resource Planning System, a combined JHHS/JHU financial systems solution. Ms. Reel is the 2002 recipient of the National CIO 20/20 Vision Leader Award and was named CIO of the Year 2000 by the College of Healthcare Information Management Executives. Ms. Reel is a member of Educause, the Healthcare Information Systems Executive Association, the College of Healthcare Information Systems Executives, the Healthcare Information Management and Systems Society, and the Inaugural Board of Directors Member of the National Alliance for Health Information Technology. She currently serves on the client advisory boards of IBM, GE Medical Systems, Eclipsys, Verizon, Compuware, and the Information Systems Advisory Council for the U.S. Department of Homeland Security. Ms. Reel joined Johns Hopkins in 1990 with more than fifteen years of experience in information systems. She graduated from the University of Maryland with a degree in information systems management and holds an MBA from Loyola College in Maryland.

Appendix C: Letters of Support

STATE OF MARYLAND
OFFICE OF THE GOVERNOR

MARTIN O'MALLEY
GOVERNOR

STATE HOUSE
100 STATE CIRCLE
ANNAPOLIS, MARYLAND 21401-1925
410-974-3901
TOLL FREE: 1-800-811-8336

TTY USERS CALL VIA MD RELAY

September 22, 2009

David Blumenthal MD, MPP
National Coordinator for Health Information Technology
Department of Health and Human Services
200 Independence Avenue, S.W.
Washington, DC 20201

RE: State Agency Designation – Letter of Support

Dear Dr. Blumenthal,

The State of Maryland is pleased to submit an application for funding under the *State Grants to Promote Health Information Technology Planning and Implementation Projects*. Maryland has placed a high priority on implementing a statewide health information exchange and on the adoption of electronic health records. Maryland is well positioned to use the funding to accelerate and enhance our plans to implement a private and secure statewide exchange. I have designated the Maryland Health Care Commission (MHCC) as the agency to submit the application.

The MHCC is an independent regulatory agency with a broad mission addressing health care quality, cost, and access. Three years ago, they began the process of planning a health information exchange by engaging numerous stakeholders to address fundamental policy issues and to develop a course of action. MHCC has brought together a series of multi-stakeholder groups to discuss a range of policy issues and has published a number of major policy reports based on these consensus-building deliberations. The MHCC will work in partnership with the State's Department of Health and Mental Hygiene (DHMH). This partnership will be important as electronic health information systems are put to use, given the important role played by DHMH in public health activities, its role in health care regulation, and through its funding of healthcare through the Medicaid program.

On May 19, 2009, I signed a bill into law that required the designation of a multi-stakeholder group to implement a statewide health information exchange. The Chesapeake Regional Information System for our Patients (CRISP) was selected through a competitive process. CRISP consists of the Johns Hopkins Health System, MedStar Health, University of Maryland Medical System, Erickson Retirement Communities, and Erickson Foundation, with additional strong support from two dozen major stakeholders across the State, including minority and safety net provider interests. In August, the MHCC approved $10 million in funding through the all-payor rate setting system.

The prerequisite for each state to designate an HIT Coordinator is a practical requirement that I believe will help ensure that the deliverables are met and Maryland coordinates health information exchange policy with other states. I have designated the Director of the Commission's Center for Health Information Technology, David Sharp, as the HIT Coordinator for Maryland. You can contact David at (410) 764-3578 or via e-mail at dsharp@mhcc.state.md.us. If you have any questions that I can address, please do not hesitate to contact my office.

Sincerely,

Martin J. O'Malley
Governor

STATE OF MARYLAND
DHMH
Maryland Department of Health and Mental Hygiene
201 W. Preston Street • Baltimore, Maryland 21201
Martin O'Malley, Governor · Anthony G. Brown, Lt. Governor · John M. Colmers, Secretary

September 17, 2009

Mr. David Blumenthal, MD, MPP
National Coordinator for Health Information Technology
Department of Health and Human Services
200 Independence Avenue, S.W.
Washington, DC 20201

Dear Dr. Blumenthal,

The Maryland Department of Health and Mental Hygiene (DHMH) is pleased to support the Maryland Health Care Commission's (MHCC) grant application for the *State Health Information Exchange Cooperative Agreement Program*. DHMH, and specifically the Maryland Medicaid program, supports the MHCC in implementing a statewide Health Information Exchange (HIE). MHCC is well positioned to accelerate the implementation of a private and secure statewide HIE with grant funding.

Maryland Medicaid will work with the statewide HIE to explore data sharing opportunities under the Medicaid Information Technology Architecture (MITA) transformation project. We will coordinate with the statewide HIE to avoid redundancies in technology implementation. This collaboration will also ensure that providers are well positioned to take advantage of the incentives for adoption and meaningful use under the *American Recovery and Reinvestment Act of 2009*.

We look forward to supporting this important initiative to transform health care in Maryland. If you have any questions, please feel free to contact Ms. Tricia Roddy, Director, Planning Administration, at 410-767-5809.

Sincerely,

John G. Folkemer, Deputy Secretary
Health Care Financing

cc: Tricia Roddy

BALTIMORE
Medical SYSTEM

Sept 17, 2009

Dr. Rex Cowdry
Executive Director
Maryland Health Care Commission
4160 Patterson Ave.
Baltimore, MD 21215

Dear Dr. Cowdry,
Baltimore Medical System is pleased to support the Maryland Health Care Commission (MHCC) in their grant application for the *State Health Information Exchange Cooperative Agreement Program* through the Office of the National Coordinator for Health Information technology. As an independent regulatory agency, MHCC has been very successful in addressing health care quality, cost, and access, and advancing health information technology. MHCC is well positioned to accelerate the implementation of a private and secure statewide HIE with grant funding.
We believe that Maryland has been proactive in its efforts to continuously improve health care delivery and with MHCC's efforts to put in place a health information exchange. Through a well-designed competitive planning process, MHCC selected the Chesapeake Regional Information System for our Patients (CRISP) as the state designated entity to implement a statewide health information exchange. The selection of CRISP to implement the health information exchange is a vital step to improving the quality and efficiency of health care in Maryland.
We are confident that the MHCC is well prepared to implement the statewide HIE and look forward to working on this important initiative to transform health care in Maryland. If you have any questions, please feel free to contact me.

Sincerely,

Jay Wolvovsky
President/CEO

September 17, 2009

Dr. Rex Cowdry
The Maryland Health Care Commission
4160 Patterson Ave.
Baltimore, MD 21215

Dear Dr. Cowdry,

Bravo Health is pleased to support the Maryland Health Care Commission (MHCC) in their grant application for the *State Health Information Exchange Cooperative Agreement Program* through the Office of the National Coordinator for Health Information technology. As an independent regulatory agency, MHCC has been very successful in addressing health care quality, cost, and access, and advancing health information technology. MHCC is well positioned to accelerate the implementation of a private and secure statewide HIE with grant funding.

We believe that Maryland has been proactive in its efforts to continuously improve health care delivery and with MHCC's efforts to put in place a health information exchange. Through a well-designed competitive planning process, MHCC selected the Chesapeake Regional Information System for our Patients (CRISP) as the state designated entity to implement a statewide health information exchange. The selection of CRISP to implement the health information exchange is a vital step to improving the quality and efficiency of health care in Maryland.

We are confident that the MHCC is well prepared to implement the statewide HIE and look forward to working on this important initiative to transform health care in Maryland. If you have any questions, please feel free to contact me.

Sincerely,

Mark Puente

3601 O'Donnell St., Baltimore, MD 21224 | www.bravohealth.com

Calvert Memorial Hospital
Tradition. Quality. Progress.

September 17, 2009

Rex W. Cowdry, M.D.
Executive Director
Maryland Health Care Commission
4160 Patterson Avenue
Baltimore, MD. 21215

Dear Dr. Cowdry,

Calvert Memorial Hospital (CMH), a non-profit community hospital in Calvert County, Maryland, is pleased to support the Maryland Health Care Commission (MHCC) in their grant application for the *State Health Information Exchange Cooperative Agreement Program* through the Office of the National Coordinator for Health Information Technology. As an independent regulatory agency, MHCC has been very successful in addressing health care quality, cost, and access, and advancing health information technology. MHCC is well positioned to accelerate the implementation of a private and secure statewide HIE with grant funding.

As a leading provider of healthcare in Southern Maryland, CMH aims to bring quality care and innovative services to people throughout our community. To realize this goal, CMH utilizes health information technology to participate in several initiatives. We recently became the first hospital in the state of Maryland to implement eICU technology as part of the Maryland eCare initiative as demonstrated to our governor and to the Majority Leader in the U.S. House of Representatives. CMH has ranked first or second in the state these past two years in the implementation of medication safety practices and systems, according to a survey of 43 Maryland hospitals. The survey, conducted annually by the Maryland Patient Safety Center, helps facilities target areas for improvement. The survey is part of the MEDSAFE Project, a collaborative effort between the Maryland Hospital Association and the Delmarva Foundation.

We believe that Maryland has been proactive in its efforts to continuously improve health care delivery and with MHCC's efforts to put in place a health information exchange. Through a well-designed competitive planning process, MHCC selected the Chesapeake Regional Information System for our Patients (CRISP) as the state designated entity to implement a statewide health information exchange. The selection of CRISP to implement the health information exchange is a vital step to improving the quality and efficiency of health care in Maryland.

We are confident that the MHCC is well prepared to implement the statewide HIE and look forward to working on this important initiative to transform health care in Maryland. If you have any questions, please feel free to contact me.

Sincerely,

Edward J. Grogan, MS-IST, CCE, CPHIMS
Vice President, Information Services
Chief Information Officer

100 HOSPITAL ROAD • PRINCE FREDERICK, MD 20678
410-535-4000 • 301-855-1012 • TDD 410-535-5630 • www.calverthospital.com

Chet Burrell
President and Chief Executive Officer

CareFirst BlueCross BlueShield
1501 S. Clinton Street, Suite 700
Baltimore, MD 21224-5744
Tel. 410-605-2558
Fax 410-781-7606
E-mail: chet.burrell@carefirst.com

CareFirst BlueCross BlueShield

October 5, 2009

Rex W. Cowdry, M.D.
Executive Director
Maryland Health Care Commission
4160 Patterson Avenue
Baltimore, MD 21215

Dear Dr. Cowdry:

The efficient application of health information technology is critical to successfully responding to such challenging issues as escalating health care costs, quality care delivery and transparency. CareFirst BlueCross BlueShield sees creation of strong health information technology (HIT) linkages in the region as an essential first step to achieving our mutual goal of affordable, quality health care.

As such, we are pleased to support the Maryland Health Care Commission (MHCC) in its grant application for the *State Health Information Exchange Cooperative Agreement Program* through the Office of the National Coordinator for Health Information technology. In its role as an independent regulator, the MHCC has shown success in addressing health care quality, cost and access issues through better health information technology. Given sufficient funding, the MHCC is well positioned to accelerate the implementation of a private and secure statewide Health Information Exchange (HIE).

As the Mid-Atlantic region's largest health insurer, covering 3.4 million members, CareFirst has contributed millions of dollars in support of HIT initiatives at the community, hospital and regional level. This support is designed to act as a catalyst for promoting the application of health information technology benefiting not only CareFirst members but the entire community.

We believe that the State of Maryland, too, has been proactive in its efforts to continuously improve health care delivery through MHCC's efforts to put into place a health information exchange. Through a well-designed competitive planning process, MHCC selected the Chesapeake Regional Information System for our Patients (CRISP) as the state-designated entity implementing a statewide health information exchange. CRISP work in implementing the state's HIE is vital to improving the quality and efficiency of health care in Maryland.

We are confident that, working with CRISP, the MHCC is well prepared to implement the statewide HIE and look forward to working on this important initiative to transform the delivery of health care in Maryland. If you have any questions, please feel free to contact me.

Sincerely,

Chet Burrell
President and Chief Executive Officer
CareFirst, Blue Cross & Blue Shield

Center for Health Information and Decision Systems

CHIDS

UNIVERSITY OF MARYLAND
ROBERT H. SMITH SCHOOL OF BUSINESS

DECISION, OPERATIONS AND INFORMATION TECHNOLOGIES

September 21, 2009

CHIDS
Van Munching Hall
College Park, MD 20742
University of Maryland
www.smith.umd.edu/chids
chids@rhsmith.umd.edu
301.405.2206

Ritu Agarwal, Ph.D.
Robert H. Smith Dean's Chair of Information Systems
Director, Center for Health Information and Decision Systems

Dear Dr. Cowdry,

The Center for Health Information and Decision Systems is pleased to support the Maryland Health Care Commission (MHCC) in their grant application for the *State Health Information Exchange Cooperative Agreement Program* through the Office of the National Coordinator for Health Information technology. As an independent regulatory agency, MHCC has been very successful in addressing health care quality, cost, and access, and advancing health information technology. MHCC is well positioned to accelerate the implementation of a private and secure statewide HIE with grant funding. We believe that Maryland has been proactive in its efforts to continuously improve health care delivery and with MHCC's efforts to put in place a health information exchange.

Through a well-designed competitive planning process, MHCC selected the Chesapeake Regional Information System for our Patients (CRISP) as the state designated entity to implement a statewide health information exchange. The selection of CRISP to implement the health information exchange is a vital step to improving the quality and efficiency of health care in Maryland. In our role as the leading university campus within the state of MD University System, and as educators and researchers, we share a common goal of improving the economic and social well-being of citizens of the state. We believe Maryland is uniquely positioned to be a best practice example for other states seeking to implement HIEs. The center's research on how IT can be leveraged to alleviate quality and cost concerns in healthcare delivery will provide important insights as the HIE implementation effort unfolds.

We are confident that the MHCC is well prepared to implement the statewide HIE and look forward to working on this important initiative to transform health care in Maryland. If you have any questions, please feel free to contact me.

Sincerely,

Ritu Agarwal

Ritu Agarwal

About CHIDS: CHIDS is an academic research center that is designed to research, analyze, and recommend solutions to challenges surrounding the introduction and integration of information and decision technologies into the health care system. We serve as a focal point for thought leadership around the topic of health information and decision systems. We draw on the expertise of the Decision, Operations and Information Technologies department at the Smith School, the University of Maryland Medical Center, University Hospital, and other assets in the University of Maryland network.

September 22, 2009

Rex W. Cowdry, M.D.
Executive Director
Maryland Health Care Commission
4160 Patterson Avenue
Baltimore, Maryland 21215

Re: State Health Information Exchange Cooperative Agreement Program Grant Application

Dr. Dr. Cowdry,

Columbia Medical Practice (CMP) is very pleased to support the Maryland Health Care Commission (MHCC) in the grant application for the State Health Information Exchange Cooperative Agreement Program through the Office of the National Coordinator for Health Information Technology.

As you know our practice is a 30 provider multi-specialty primary care group which has actively pursued the use to information technology to improve the quality of care for our patients and to improve the efficiency of our operations. We have received the recognized from the NCQA for efforts and have been selected to participate in the Medicare EHR Demonstration in the State of Maryland.

As an independent regulatory agency, the MHCC has been very successful in addressing health care quality, cost, and access, and in advancing health information technology. MHCC's leadership has been instrumental in moving forward with the critical stakeholders. We believe base on the leadership of MHCC is well positioned to accelerate the implementation of a private and secure statewide HIE with grant funding.

We believe that Maryland has been proactive in its efforts to continuously improve health care delivery and with MHCC's efforts to put in place a health information exchange. Through a well-designed competitive planning process, MHCC selected the Chesapeake Regional Information System for our Patients (CRISP) as the state designated entity to implement a statewide health information exchange.

We are confident that the MHCC is well prepared to implement the statewide HIE and look forward to working on this important initiative to transform health care in Maryland. If you have any questions, please feel free to contact me at 410-964-6176 or by email at doberlander@cmpractice.com.

Sincerely,

DeWayne L. Oberlander, MBA, MPH
Executive Director

5450 Knoll North Drive, Columbia, Maryland 21045

COMMUNITY HEALTH
INTEGRATED PARTNERSHIP
Community · Clients · Caring

September 21, 2009

David Blumenthal, MD, MPP
National Coordinator for Health Information Technology
Department of Health and Human Services
200 Independence Avenue, SW
Washington, DC 20201

Dear Dr. Blumenthal:

Community Health Integrated Partnership (CHIP) is pleased to support the Chesapeake Regional Information System for our Patients' development of a Health Information Exchange (HIE) for the State of Maryland, and its application for funding under the American Recovery and Reinvestment Act. CHIP is particularly supportive of CRISP for two reasons: 1) its inclusive, open and collaborative approach to stakeholders throughout its development, and, 2) the level of commitment and expertise its staff and partners bring to the HIE's development and deployment.

CHIP is comprised of eleven Federally Qualified Health Centers (FQHCs) whose 57 delivery sites service over 173,000 uninsured, Medicaid, Medicare and commercially insured patients throughout urban, suburban and rural Maryland. As a leader and advocate for quality community-based health care services in Maryland, CHIP provides these community health centers with the business expertise to achieve the shared goal of quality improvement in the care they deliver. As part of these services, CHIP provides Practice Management and Electronic Health Record systems to its member health centers. Our current implementation of GE's Centricity Ambulatory EMR product is being deployed to 42 care delivery sites across the state (the remaining delivery sites already have an EMRs in place).

Providing health care services to patient populations that are largely uninsured and chronically ill presents a host of treatment compliance challenges which a HIE will help alleviate. One of the most significant of these is the use of emergency departments for non-emergent care that with an "exchange of key health information" we can begin to reverse. In addition, an HIE will facilitate more timely access to diagnostic and specialty consult reports critical to the management of our chronically ill patients. These are just two examples of the multiple uses CHIP envisions when it links its EMR into the state-wide exchange. .

We believe CRISP has the commitment and talent to quickly and effectively implement its HIE strategy as demonstrated through its success in managing and implementation similar large scale technology projects. CHIP urges your support of its application for funding.

Sincerely,

Salliann Albom
Chief Executive Officer

804 Landmark Drive, Suite 128, Glen Burnie, MD 21061 ~ ph: 410.761.8100 ~ f: 410.766.2286
www.chipmd.org

The Erickson FOUNDATION
Education Across the Lifespan

September 17th, 2009

Rex Cowdry, M.D., Executive Director
Maryland Health Care Commission
4160 Patterson Avenue
Baltimore, Maryland 21215

Dear Dr. Cowdry,

The Erickson Foundation is pleased to support the Maryland Health Care Commission (MHCC) in their grant application for the *State Health Information Exchange Cooperative Agreement Program* through the Office of the National Coordinator for Health Information technology. As an independent regulatory agency, MHCC has been very successful in addressing health care quality, cost, and access, and advancing health information technology. MHCC is well positioned to accelerate the implementation of a private and secure statewide HIE with grant funding.

We believe that Maryland has been proactive in its efforts to continuously improve health care delivery and with MHCC's efforts to put in place a health information exchange. Through a well-designed competitive planning process, MHCC selected the Chesapeake Regional Information System for our Patients (CRISP) as the state designated entity to implement a statewide health information exchange. The selection of CRISP to implement the health information exchange is a vital step to improving the quality and efficiency of health care in Maryland.

We are confident that the MHCC is well prepared to implement the statewide HIE and look forward to working on this important initiative to transform health care in Maryland. If you have any questions, please feel free to contact me.

Sincerely,

John C. Erickson
Founder and Executive Chairman
Erickson Retirement Communities

DII:kh

701 Maiden Choice Lane
Catonsville, Maryland 21228
410-737-8901
Fax 410-737-8856

Erickson®
Retirement Communities

September 17th, 2009

Rex Cowdry, M.D., Executive Director
Maryland Health Care Commission
4160 Patterson Avenue
Baltimore, Maryland 21215

Dear Dr. Cowdry,

Erickson Retirement Communities is pleased to support the Maryland Health Care Commission (MHCC) in their grant application for the *State Health Information Exchange Cooperative Agreement Program* through the Office of the National Coordinator for Health Information technology. As an independent regulatory agency, MHCC has been very successful in addressing health care quality, cost, and access, and advancing health information technology. MHCC is well positioned to accelerate the implementation of a private and secure statewide HIE with grant funding.

We believe that Maryland has been proactive in its efforts to continuously improve health care delivery and with MHCC's efforts to put in place a health information exchange. Through a well-designed competitive planning process, MHCC selected the Chesapeake Regional Information System for our Patients (CRISP) as the state designated entity to implement a statewide health information exchange. The selection of CRISP to implement the health information exchange is a vital step to improving the quality and efficiency of health care in Maryland.

We are confident that the MHCC is well prepared to implement the statewide HIE and look forward to working on this important initiative to transform health care in Maryland. If you have any questions, please feel free to contact me.

Sincerely,

Bruce R. Grindrod, Jr.

Bruce R. Grindrod, Jr.
President and CEO

DH:kh

701 Maiden Choice Lane Baltimore, Maryland 21228 410-242-2880 www.EricksonCommunities.com

Health Care For All
Maryland Citizens' Health Initiative

Health Care for All!
Maryland Citizens' Health Initiative
2600 St. Paul Street
Baltimore, MD 21218
(410) 235-9000 (voice) -- (410) 235-8983 (fax)
info@healthcareforall.com (e-mail) http://www.healthcareforall.com

September 22, 2009

Dear Dr. Cowdry,

Health Care for All is pleased to support the Maryland Health Care Commission (MHCC) in their grant application for the *State Health Information Exchange Cooperative Agreement Program* through the Office of the National Coordinator for Health Information technology. As an independent regulatory agency, MHCC has been very successful in addressing health care quality, cost, and access, and advancing health information technology. MHCC is well positioned to accelerate the implementation of a private and secure statewide HIE with grant funding.

We appreciate and fully support MHCC's efforts to put in place a health information exchange. Thanks to your leadership, Maryland has been proactive in its efforts to continuously improve health care delivery. We believe that the selection of a consultant agency like the Chesapeake Regional Information System for Patients to implement the health information exchange is a wise step toward improving the quality and efficiency of health care in Maryland.

We are confident that the MHCC is well prepared to implement the statewide HIE and look forward to working on this important initiative to transform health care in Maryland. If you have any questions, please feel free to contact me.

Sincerely,

Vincent DeMarco

Sept. 17th, 2009

Dear Dr. Cowdry,

Health Care for the Homeless is pleased to support the Maryland Health Care Commission (MHCC) in their grant application for the *State Health Information Exchange Cooperative Agreement Program* through the Office of the National Coordinator for Health Information Technology. As an independent regulatory agency, MHCC has been very successful in addressing health care quality, cost, and access, and advancing health information technology. MHCC is well positioned to accelerate the implementation of a private and secure statewide HIE with grant funding.

Our agency has been involved in developing and implementing 21st Century health technology for some time, with clear benefits for the tens of thousands of Marylanders who experience homelessness each year. Indeed, Maryland has been proactive in its efforts to continuously improve health care delivery and with MHCC's efforts to put in place a health information exchange. Through a well-designed competitive planning process, MHCC selected the Chesapeake Regional Information System for our Patients (CRISP) as the State-designated entity to implement a statewide health information exchange. The selection of CRISP to implement the health information exchange is a vital step to improving the quality and efficiency of health care in Maryland.

We are confident that the MHCC is well prepared to implement the statewide HIE and look forward to working on this important initiative to transform health care in Maryland. If you have any questions, please feel free to contact me.

Sincerely,

Jeff Singer
President & CEO

HEALTH CARE FOR THE HOMELESS
111 Park Avenue • Baltimore, MD 21201 • 410/837-5533 • Fax 410/837-6020
www.hchmd.org • info@hchmd.org

United Way of Central Maryland

Howard County Health Department

Office of the Health Officer
7178 Columbia Gateway Drive, Columbia, MD 21046
(410) 313-6300 Fax (410) 313-6303
TDD (410) 313-2323 Toll Free 1-866 313-6300
website: www.hchealth.org

Peter L. Beilenson, M.D., M.P.H., Health Officer

September 21, 2009

Rex W. Cowdry, M.D.
Executive Director
Maryland Health Care Commission
4160 Patterson Avenue
Baltimore, Maryland 21215

Dear Dr. Cowdry:

The Howard County Health Department is pleased to support the Maryland Health Care Commission (MHCC) in their grant application for the State Health Information Exchange Cooperative Agreement Program through the Office of the National Coordinator for Health Information Technology. As an independent regulatory agency, MHCC has been very successful in addressing health care quality, cost and access, and advancing health information technology. MHCC is well positioned to accelerate the implementation of a private and secure statewide HIE with grant funding.

We believe that Maryland has been proactive in its efforts to continuously improve health care delivery and with MHCC's efforts to put in place a health information exchange. Through a well-designed competitive planning process, MHCC selected the Chesapeake Regional Information System for our Patients (CRISP) as the State designated entity to implement a statewide health information exchange. The selection of CRISP to implement the health information exchange is a vital step to improve the quality and efficiency of health care in Maryland.

We are confident that the MHCC is well prepared to implement the statewide HIE and look forward to working on this important initiative to transform health care in Maryland. If you have any questions, please feel free to contact me.

Sincerely,

Peter Beilenson, M.D., M.P.H.
Health Officer

Stephanie L. Reel
Chief Information Officer
Vice President
Information Services

Information Services
5801 Smith Avenue, Suite 2110C
Baltimore, Maryland 21209
410-735-7333 T
443-287-8356 F

JOHNS HOPKINS
MEDICINE

September 22, 2009

Rex W. Cowdry, M.D.
Executive Director
Maryland Health Care Commission
4160 Patterson Avenue
Baltimore, MD 21215

Dear Dr. Cowdry:

Johns Hopkins Medicine is pleased to support the Maryland Health Care Commission (MHCC) in their grant application for the State Health Information Exchange Cooperative Agreement Program through the Office of the National Coordinator for Health Information technology. As an independent regulatory agency, MHCC has been very successful in addressing health care quality, cost, and access, and advancing health information technology. MHCC is well positioned to accelerate the implementation of a private and secure statewide HIE with grant funding.

We believe that Maryland has been proactive in its efforts to continuously improve health care delivery and with MHCC's efforts to put in place a health information exchange. Through a well-designed competitive planning process, MHCC selected the Chesapeake Regional Information System for our Patients (CRISP) as the state designated entity to implement a statewide health information exchange. The selection of CRISP to implement the health information exchange is a vital step to improving the quality and efficiency of health care in Maryland.

We are confident that the MHCC is well prepared to implement the statewide HIE and look forward to working on this important initiative to transform health care in Maryland. If you have any questions, please feel free to contact me.

Sincerely,

Stephanie L. Reel

Stephanie L. Reel

LIFEBRIDGE
HEALTH

2411 West Lafayette Avenue
Baltimore, MD 21216-4971
410-601-5601
410-601-5777 fax

Karen R. Barker
Vice President
Chief Information Officer

September 18, 2009

To Whom It May Concern:

LifeBridge Health, Inc. is pleased to support the Maryland Health Care Commission (MHCC) in their grant application for the *State Health Information Exchange Cooperative Agreement Program* through the Office of the National Coordinator for Health Information Technology. As an independent regulatory agency, MHCC has been very successful in addressing health care quality, cost, and access, and advancing health information technology. MHCC is well positioned to accelerate the implementation of a private and secure statewide HIE with grant funding.

We believe that Maryland has been proactive in its efforts to continuously improve health care delivery and with MHCC's efforts to put in place a health information exchange. Through a well-designed competitive planning process, MHCC selected the Chesapeake Regional Information System for our Patients (CRISP) as the state designated entity to implement a statewide health information exchange.

We are confident that the MHCC is well prepared to implement the statewide HIE and look forward to working on this important initiative to transform health care in Maryland. If you have any questions, please feel free to contact me.

Sincerely,

Karen R. Barker

Vice President and CIO

Maryland
Hospital Association

MHA
6820 Deerpath Road
Elkridge, Maryland 21075-6234
Tel: 410-379-6200
Fax: 410 379-8230

September 22, 2009

Rex W. Cowdry, M.D.
Executive Director
Maryland Health Care Commission
4160 Patterson Avenue
Baltimore, MD 21215

Dear Dr. Cowdry:

The Maryland Hospital Association is pleased to support the Maryland Health Care Commission (MHCC) in their grant application for the *State Health Information Exchange Cooperative Agreement Program* through the Office of the National Coordinator for Health Information Technology. As an independent regulatory agency, MHCC has been very successful in addressing health care quality, cost, and access, and advancing health information technology. MHCC is well positioned to accelerate the implementation of a private and secure statewide HIE with grant funding.

We believe that Maryland has been proactive in its efforts to continuously improve health care delivery and with MHCC's efforts to put in place a health information exchange. Through a well-designed competitive planning process, MHCC selected the Chesapeake Regional Information System for our Patients (CRISP) as the state designated entity to implement a statewide health information exchange. The selection of CRISP to implement the health information exchange is a vital step to improving the quality and efficiency of health care in Maryland.

We are confident that the MHCC is well prepared to implement the statewide HIE and look forward to working on this important initiative to transform health care in Maryland. If you have any questions, please feel free to contact me.

Sincerely,

Carmela Coyle

Carmela Coyle
President & CEO

MedStar Health

Catherine Szenczy
Senior Vice President and
Chief Information Officer

September 23, 2009

Dear Dr. Blumental,

Medstar Health is pleased to support the Maryland Health Care Commission (MHCC) in their grant application for the *State Health Information Exchange Cooperative Agreement Program* through the Office of the National Coordinator for Health Information technology. As an independent regulatory agency, MHCC has been very successful in addressing health care quality, cost, and access, and advancing health information technology. MHCC is well positioned to accelerate the implementation of a private and secure statewide HIE with grant funding.

We believe that Maryland has been proactive in its efforts to continuously improve health care delivery and with MHCC's efforts to put in place a health information exchange. Through a well-designed competitive planning process, MHCC selected the Chesapeake Regional Information System for our Patients (CRISP) as the state designated entity to implement a statewide health information exchange.

We are confident that the MHCC is well prepared to implement the statewide HIE and look forward to working on this important initiative to transform health care in Maryland. If you have any questions, please feel free to contact Catherine Szenczy, at 410-712-6780.

Sincerely,

Catherine Szenczy

CS/vbp

5565 Sterrett Place, 5th Floor, Columbia, Maryland 21044
phone: 410 772 6780 • *fax:* 410 715 3809 • *e mail:* catherine.szenczy@medstar.net

PENINSULA REGIONAL
MEDICAL CENTER
Part of Peninsula Regional Health System

September 25, 2009

Maryland Health Care Commission
4160 Patterson Avenue
Baltimore, MD. 21215

Attn: Rex W. Cowdry, M.D., Executive Director

Dear Dr. Cowdry:

Peninsula Regional Medical Center, a 366 bed acute care facility at the hub of the Peninsula Regional Health System, is pleased to support the Maryland Health Care Commission (MHCC) in their grant application for the *State Health Information Exchange Cooperative Agreement Program* through the Office of the National Coordinator for Health Information technology. As an independent regulatory agency, MHCC has been very successful in addressing health care quality, cost, and access, and advancing health information technology. MHCC is well positioned to accelerate the implementation of a private and secure statewide HIE with grant funding.

We believe that Maryland has been proactive in its efforts to continuously improve health care delivery and with MHCC's efforts to put in place a health information exchange. Through a well-designed competitive planning process, MHCC selected the Chesapeake Regional Information System for our Patients (CRISP) as the state designated entity to implement a statewide health information exchange. The selection of CRISP to implement the health information exchange is a vital step to improving the quality and efficiency of health care in Maryland.

We are confident that the MHCC is well prepared to implement the statewide HIE and look forward to working on this important initiative to extend the use of information technology in the transformation of health care in our region and throughout Maryland. If you have any questions regarding our support of the application, please feel free to contact us.

Sincerely,

Cindy Lunsford,
Executive Vice President
410-543-7115

Raymond W. Adkins
Chief Information Officer
410-543-7433

100 East Carroll Street ▪ Salisbury, MD 21801-5403 ▪ 410 546 6400 ▪ www.peninsula.org

SHEPHERD'S CLINIC
Health Care for the Uninsured

[illegible] Kirk Avenue Baltimore, Maryland 21218
Clinic 410.467.[illegible] Admin 410.467.[illegible]
shepherdsclinic.org F 410.467.[illegible]

September 23, 2009

Dear Dr. Cowdry,

Shepherd's Clinic, a non-profit health clinic dedicated to serving Baltimore's uninsured, is delighted to support the Maryland Health Care Commission (MHCC) in their grant application for the *State Health Information Exchange Cooperative Agreement Program* through the Office of the National Coordinator for Health Information technology. As an independent regulatory agency, MHCC has been very successful in addressing health care quality, cost, and access, and advancing health information technology. MHCC is well positioned to accelerate the implementation of a private and secure statewide HIE with grant funding.

Shepherd's Clinic's mission is to provide quality health care to those who are unable to afford commercial health insurance and do not qualify for government assistance. To further this mission, we need to continually pursue the latest technologies and advancements in patient care delivery, while remaining sensitive to a nominal operating budget. We believe our mission is in sync with MHCC and fully support its application.

We're thankful that Maryland has been proactive in its efforts to continuously improve health care delivery and are pleased with MHCC's efforts to put in place a health information exchange. Through a well-designed competitive planning process, MHCC selected the Chesapeake Regional Information System for our Patients (CRISP) as the state designated entity to implement a statewide health information exchange. The selection of CRISP to implement the health information exchange is a vital step to improving the quality and efficiency of health care in Maryland.

We are confident that the MHCC is well-prepared to implement the statewide HIE and look forward to working on this important initiative to transform health care in Maryland. If you have any questions, please feel free to contact me.

Sincerely,

Jack VandenHengel, Executive Director

SAINT AGNES HOSPITAL

Sept 28, 2009

Dear Dr. Cowdry,

St. Agnes Hospital is pleased to support the Maryland Health Care Commission (MHCC) in their grant application for the *State Health Information Exchange Cooperative Agreement Program* through the Office of the National Coordinator for Health Information technology. As an independent regulatory agency, MHCC has been very successful in addressing health care quality, cost, and access, and advancing health information technology. MHCC is well positioned to accelerate the implementation of a private and secure statewide HIE with grant funding.

We believe that Maryland has been proactive in its efforts to continuously improve health care delivery and with MHCC's efforts to put in place a health information exchange. Through a well-designed competitive planning process, MHCC selected the Chesapeake Regional Information System for our Patients (CRISP) as the state designated entity to implement a statewide health information exchange. The selection of CRISP to implement the health information exchange is a vital step to improving the quality and efficiency of health care in Maryland.

We are confident that the MHCC is well prepared to implement the statewide HIE and look forward to working on this important initiative to transform health care in Maryland. If you have any questions, please feel free to contact me

Sincerely,

William C. Greskovich
Vice President of Operations and Campus Construction

[illegible]

CATHOLIC HEALTH INITIATIVES

SEP 24 2009 PM 2:34

St. Joseph Medical Center

September 21, 2009

To Whom It May Concern:

St. Joseph Medical Center is pleased to support the Maryland Health Care Commission (MHCC) in their grant application for the *State Health Information Exchange Cooperative Agreement Program* through the Office of the National Coordinator for Health Information technology. As an independent regulatory agency, MHCC has been very successful in addressing health care quality, cost, and access, and advancing health information technology. MHCC is well positioned to accelerate the implementation of a private and secure statewide HIE with grant funding.

We believe that Maryland has been proactive in its efforts to continuously improve health care delivery and with MHCC's efforts to put in place a health information exchange. Through a well-designed competitive planning process, MHCC selected the Chesapeake Regional Information System for our Patients (CRISP) as the state designated entity to implement a statewide health information exchange. We are confident that the MHCC is well prepared to implement the statewide HIE and look forward to working on this important initiative to transform health care in Maryland. If you have any questions, please feel free to contact me by phone at 410-337-1205 or e-mail richardboehler@catholichealth.net.

Sincerely,

Richard Boehler, M.D.
Vice President for Medical Affairs/Chief Medical Officer

7601 Osler Drive Towson, MD 21204-7582 P 410.337.1000
TDD Access 410.337.1671 www.sjcmd.org

SUMMIT HEALTH INSTITUTE FOR RESEARCH AND EDUCATION, INC.
Working to Eliminate Health Disparities and Aid Vulnerable Populations in Attaining Optimal Health

1776 Massachusetts Ave. NW
Suite 615
Washington, DC 20036-1904

SHIRE Executive Officers

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President

Ruth T. Perot, M.A.T.
Executive Director/ Chief Executive Officer

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Ruth T. Perot, M.A.T.

Claudia Schlosberg, J.D.

Office: (202) 371-0277
Fax: (202) 452-8111
Toll Free: (877) 371-4900

Internet: www.shireinc.org

September 22, 2009

Dear Dr. Blumenthal:

Summit Health Institute for Research and Education, Inc. (SHIRE) is pleased to support the Maryland Health Care Commission (MHCC) in their grant application for the *State Health Information Exchange Cooperative Agreement Program* through the Office of the National Coordinator for Health Information technology. As an independent regulatory agency, MHCC has been very successful in addressing health care quality, cost, and access, and advancing health information technology. MHCC is well positioned to accelerate the implementation of a private and secure statewide HIE with grant funding.

We believe that Maryland has been proactive in its efforts to continuously improve health care delivery and with MHCC's efforts to put in place a health information exchange. Through a well-designed competitive planning process, MHCC selected the Chesapeake Regional Information System for our Patients (CRISP) as the state designated entity to implement a statewide health information exchange.

We are confident that the MHCC is well prepared to implement the statewide HIE and look forward to working on this important initiative to transform health care in Maryland. We are also very pleased that MHCC has demonstrated their concern for the rights of consumers and the providers who care for them. If you have any questions, please feel free to contact me at 202-371-0277 or at my email address rjdavis@shireinc.org .

Sincerely,

Russell J. Davis

Russell J. Davis, DPA, MAPT
President

UNIVERSITY OF MARYLAND
MEDICAL SYSTEM

[illegible]
[illegible]
[illegible]
www.umms.org

[illegible]

September 24, 2009

Dear Dr. Cowery:

Then University of Maryland Medical System is pleased to support the Maryland Health Care Commission (MHCC) in their grant application for the State Health Information Exchange Cooperative Agreement Program through the Office of the National Coordinator for Health Information Technology. As an independent regulatory agency, MHCC has been very successful in addressing health care quality, cost, access, and advancing health information technology. MHCC is well positioned to accelerate the implementation of a private and secure statewide HIE with grant funding.

We believe that Maryland has been proactive in its efforts to continuously improve health care delivery and with MHCC's efforts to put in place a health information exchange. Through a well-designed competitive planning process, MHCC selected the Chesapeake Regional Information System for our Patients (CRISP) as the state designated entity to implement a statewide health information exchange. The selection of CRISP to implement the health information exchange is a primary step to improving the quality and efficiency of health care in Maryland.

We are confident that the MHCC is prepared to implement the statewide HIE and look forward to working on this important initiative to transform health care in Maryland. If you have any questions, please feel free to contact me.

Sincerely,

Jon Burns

Senior Vice President & Chief Information Officer

David Sharp, Ph.D., Director
Center for Health Information Technology

4160 Patterson Avenue
Baltimore, MD 21215
(410) 764-3460
www.mhcc.maryland.gov