



# **Utah Statewide Clinical Health Information Exchange 2011**

## **Annual Legislative Report**

October 2011

Submitted to: The Utah Legislative Health  
and Human Services Interim  
Committee

Required by: Utah Code Title 26 Chapter 1  
Section 37. Duty to Establish  
Standards for the Electronic  
Exchange of Clinical Health  
Information, Enacted April  
2008

Submitted by: State of Utah Department of  
Health and  
Utah Health Information  
Network

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Utah Health Code §26-1-37 Duty to establish standards for the electronic exchange of clinical health information.

- (5) The department shall report on the use of the standards for the electronic exchange of clinical health information to the legislative Health and Human Services Interim Committee no later than October 15, 2008 and no later than every October 15th thereafter. The report shall include publicly available information concerning the costs and savings for the department, third party payers, and health care providers associated with the standards for the electronic exchange of clinical health records.

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## Executive Summary

There is a synergy in Utah's health innovation initiatives. Governor Gary Herbert and the Utah Legislature have made health system reform and innovation a priority with a goal that all Utah citizens have health insurance coverage, and in the process assist businesses in Utah to become more successful in reducing their health care costs and improving the quality of health for all Utah. It is widely acknowledged that standardized health information exchange (HIE) will reduce health care cost. The Utah legislature passed key reform measures that promote the use of health information technology (HIT) and HIE to transform the health care delivery system. While Utah clinical health information exchange (cHIE) is in full implementation, the collection of patient consent poses a serious challenge to cHIE sustainability. The Utah HIT Governance Consortium, lead by Robert Rolfs, MD, the State Health IT Coordinator and Deputy Director for Utah Department of Health, formed to coordinate and improve the quality and efficiency of American Recovery Reinvestment Act (ARRA) Health Information Technology for Economic and Clinical Health (HITECH) applications. The robust HIT infrastructure Utah is building has the potential to optimize our ability to access accurate information on health care quality indicators, which supports transparency of quality and cost, which can be used for health payment reforms.

Many HIT initiatives in Utah are mature. While Utah enjoys widespread HIE, Utah is moving to advance statewide use of HIT and clinical health information exchange to advance health care quality and reform using ARRA funds awarded through the Statewide Health Information Exchange Program, HIT Regional Extension Center, and Beacon Community Program. The Utah cHIE is increasingly available to the provider community. In July of this year Utah incorporated an additional seven standards for the electronic exchange of clinical health information. HealthInsight and its partners promote clinician use of health IT and support the necessary work flow redesign and technical support to connect health care providers the clinical exchange to improve patient care and decrease unnecessary cost in the health care system.

Utah's history of statewide cooperation and regional sharing, executive leadership and legislative reforms, relatively high penetration of Electronic Health Records (EHR) and Hospital Information Management Systems (HIMS) have enabled community-based HIE. Our major health systems, such as Intermountain Healthcare and the University of Utah have invested years building their HIT systems. These efforts are supported by experts from the University of Utah, Department of Biomedical Informatics, one of the oldest Biomedical Informatics programs in the nation. Utah operates a successful self-sustained administrative health information exchange through the Utah Health Information Network (UHIN) and the difficult work is underway to plan an appropriate consent strategy to ensure that the clinical exchange can reach the necessary provider utility to implement a business case that promotes a self-sustaining enterprise. Multiple efforts are underway to assist outpatient practices in adoption and effective use of EHR systems producing EHR adoption rates much higher than the national average.

UHIN has been a partner with the Utah Department of Health and public health information exchange through the immunization registry and electronic death registration system. The cHIE will strengthen and expand the existing public-private collaboration in HIE and the UDOH will build capacity over the project period for the

exchange of clinical information between public health agencies and health care providers to provide improved health care quality and reduced cost for Utah health care consumers.

## I. Introduction

### ☐ State Legislation for Health Information Exchange and Healthcare Reform

Utah health policymakers acknowledge health information technology (HIT) and health information exchange (HIE) are two foundational infrastructure components necessary to support the transformation health systems. To ensure that health care reform leads to better health care, the Utah legislature passed the following legislation to improve efficiency and quality of health care and reduce cost since 2005:

<b>Legislative Sponsors</b>	<b>Bill No.</b>	<b>Bill Title</b>	<b>Year Passed</b>
Christensen, A.	S.B. 132	HEALTH CARE CONSUMER'S REPORT	2005
Daw, B.	H.B. 137	Pain Medication Management and Education	2007
Menlove, R.	H.B. 6	Controlled Substance Database Amendments	2007
Morley, M.	H.B. 9	Health Care Cost and Quality Data	2007
Clark, D.	H.B. 133	Health System Reform	2008
Curtis, G.	H.B. 326	CHIP Open-Enrollment	2008
Daw, B.	H.B. 119	Controlled Substance Database Amendments	2008
Menlove, R.	H.B. 24	Amendments to Utah Digital Health Service Commission Act	2008
Menlove, R.	H.B. 47	Standards for Electronic Exchange of Clinical Health Information	2008
Clark, D.	H.B. 188	Health System Reform - Insurance Market	2009
Daw, B.	H.B. 106	Controlled Substance Database Amendments	2009
Dunnigan, J.	H.B. 331	Health Reform--Health Insurance Coverage in State Contracts	2009
Menlove, R.	H.B. 128	Electronic Prescribing Act	2009
Newbold, M.	H.B. 165	Health Reform--Administrative Simplification	2009
Clark, D.	H.B. 294	Health System Reform Amendments	2010
Menlove, R.	H.B. 186	Controlled Substance Database Revisions	2010
		Health Reform - Uniform Electronic Standards - Insurance	
Newbold, M.	H.B. 52	Information	2010
Dunnigan, J.	H.B. 128	Health Reform Amendments	2011

### ☐ Clinical Health Information Exchange (cHIE)

Utah's statewide exchange of administrative health data began operations in 1993. In 2004, Utah began to develop the cHIE to support health care reform. The goal of the Utah cHIE initiative is to create a secure electronic clinical health information exchange (cHIE) network whereby a Utah health care provider can, with patient permission, access basic medical information about their patients no matter where the patient receives care in Utah. Health care providers are not required to participate but may choose the option to participate in the cHIE. In February of 2011, the UHIN board of Directors voted to make the cHIE require patient active consent to share data. This has created a significant challenge in the planned implementation and short-term sustainability of the cHIE.

Participation in the cHIE allows health care providers to have timely, secure and appropriate electronic access to accurate and essential patient health information for treatment purposes, improve the quality of health care (through more informed decision making) and reduce health care cost (through avoidance of duplicative and unnecessary tests and treatments). The cHIE can save money through improved efficiencies in management of health care services by reducing the administrative paperwork and errors between providers and payers. Access to patient data is controlled by the patient: until the patient makes a 'consent decision' and elects either "Participating" or "Limited", no patient information is shared through the cHIE. UHIN is creating strategies to enable the rapid collection of consent decisions. The following diagram describes the cHIE functional architecture and electronic connections.

## Utah Statewide Clinical Health Information Exchange: Functional Architectural Diagram

### Basic Technical Functions:

#### 1) A Secure Electronic "Post Office"

- Deliver documents to intended recipient

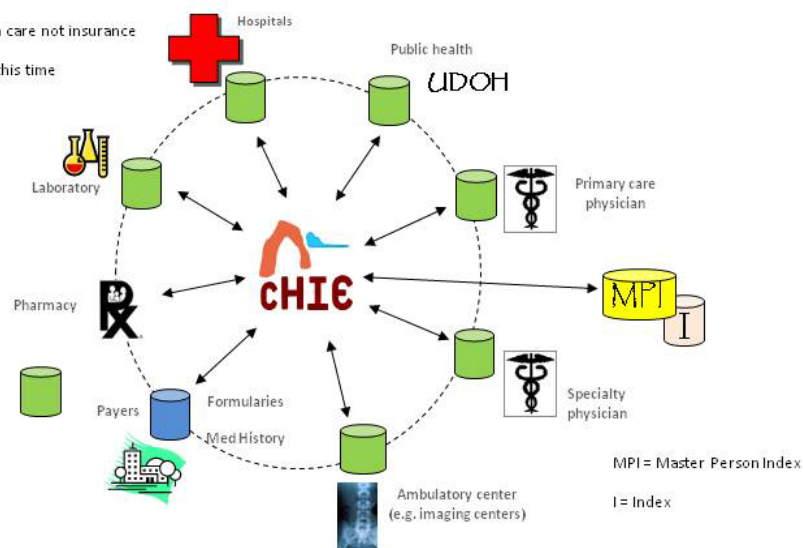
#### 2) A Secure Electronic Query (Virtual Health Record)

- One connection allows you to communicate with all other UHIN cHIE members
- Patient Permission
- Longitudinal patient records based on care not insurance
- Only available to authorized users at this time

#### 3) Identity Management

### Standardized Individual Data Repositories Contain:

- 1) Lab Results
- 2) Rx History
- 3) Problem List
- 4) Allergies
- 5) Immunizations



All data, both at rest and in motion, is fully encrypted to federal standards. The cHIE has been accredited by a nationally-recognized third party – EHNAC<sup>1</sup> – as meeting or exceeding all HIPAA privacy and security requirements, including the recent changes created in HITECH.

## II. Progress in Implementing the Statewide Clinical Health Information Exchange (cHIE) From October 2008 to October 2011

<sup>1</sup> EHNAC = Electronic healthcare network accreditation commission. [www.ehnac.org](http://www.ehnac.org)

## ❑ **Administrative Rule 380-70 Standards for Electronic Exchange of Clinical Health Information**

The most important piece of the cHIE solution is the standards and specifications associated with the cHIE network. The standards and specifications will dictate how the cHIE participants will function and communicate with each other. Utah Department of Health completed the administrative rule-making process and adopted the Utah Health Information Network's proposed standards for the seven clinical standards through Administrative Rule R380-70 Standards for Electronic Exchange of Clinical Health Information effective July 5, 2011. There is additional work to do, but the community has been very productive in the creation of clinical message standards.

## ❑ **Electronic Commerce Agreement (ECA) and Information Sharing Addendum**

To simplify administration for members, UHIN utilizes a single Electronic Commerce Agreement (ECA) that all members must sign. The ECA covers HIPAA privacy and security issues and because the ECA serves as a HIPAA Business Associate Agreement, it allows the members to avoid having to sign HIPAA Business Associate Agreements with everyone else on the network. The cHIE Addendum adds additional clarifications and protections for members who participate in the cHIE. The cHIE Laboratory Service Level Agreement sets the definition of cHIE services, measurements, and procedures of cHIE operation. These agreements undergo periodic review as required given regulatory and policy changes. Currently the ECA and cHIE Information Sharing Addendum to the ECA are under review and revision by the UHIN Legal Committee.

cHIE Experiences: changes because of clinical exchange.

Moab is a small community and lab tests performed by the hospital, until recently, have been printed and available for pick up by the local providers. The office manager of one of the clinics would drive and pick up the clinic's tests three times a week. The hospital would send someone to deliver the results the other two days. Now that the hospital is connected to the cHIE, these same tests can be sent electronically. Critical and abnormal results are identified and delivered timely. These results are delivered to the clinic's EHR electronically and added to the patient's electronic medical record.

Avalon HealthCare, a skilled nursing care facility spent a significant amount of administrative time processing preauthorization forms with Utah Medicaid. Delays in processing due to the need for additional information for Medicaid to authorize the stay resulted in the delay of care for the patient and increased administrative cost. The cHIE is now sending an electronic preauthorization ensuring timely delivery and accurate information between the skilled nursing facility and Utah Medicaid. cHIE provides a low cost mechanism to send additional documentation securely and electronically with an acknowledgement of receipt.

## ❑ **Consensus-based Development of Technical Specifications**

UHIN Standards Committee leads the standards development process. To date, the Utah healthcare community has asked UHIN to work on the following clinical information exchange standards.

### ➤ **Clinical Information Standards – R380-70**

The following standards have been through development, recommendation to and adoption by the UHIN Board of Directors, and submitted by the UDOH for inclusion in the state administrative rule R380-70.

1. Chief Complaint Standard Version 2.0

2. Clinical Acknowledgement and Error Status Standard Version 2.0
3. Clinical Laboratory Results Standard Version 2.0
4. Discharge Summary Standard Version 2.0
5. History and Physical Standard Version 2.0
6. Operative Report Standard Version 2.0
7. Radiology Report Standard Version 2.0
8. Standardized Laboratory Test Result Identifiers Standard Version 2.0

### ➤ **Clinical Information Standards in Development**

The following standards have been through development, recommendation to and adoption by the UHIN Board of Directors.

- Security, update
- Antepartum Record
- Radiology Images

The following standards are in the development process with an expected completion in 2012.

- Medication History Request and Response
- Laboratory Orders, Commercial Laboratories
- Laboratory Orders, State Laboratory
- Continuity of Care

### ❑ **cHIE Implementation**

The cHIE technical implementation which began in January 2009 in Grand, Box Elder, and Cache Counties has expanded to connect providers along the Wasatch Front. While the primary value of the cHIE is in providing healthcare clinicians with accurate, accessible, and complete patient care information, the cHIE is providing value to providers and payers facing costly administrative processing challenges as well, for example, the exchange of prior authorization information.

The cHIE ‘connect the dots’ functionality integrates health data from disparate sources to provide the healthcare clinician with a more complete patient care picture. This integration of disparate sources has the potential to provide the largest value to healthcare providers. To realize that value UHIN must accomplish two significant tasks: (1) “fill the wells” and (2) collect “patient consent decisions” (new as of an early 2011 UHIN Board decision). “Filling the Wells” means that data about patients is placed into the cHIE. Collecting “Consent Decisions” means to collect from every patient, a decision, yes or no, on whether the cHIE may store and share the patient’s health information and make that information accessible to the patient’s treating healthcare providers.

The cHIE implementation focused efforts on getting patient health data into the cHIE by connecting the large data sources along the Wasatch Front to the cHIE. Referred to as “filling the wells” the premise is to have enough patient health data available to the treating provider such that the cHIE brings value to the provider in the provision of care. UHIN has connected to most of the large data sources to “fill the wells.” Three of the



four major hospital systems have now joined the cHIE as Data Sources. The three are HCA/MountainStar (6 hospitals), IASIS (4 hospitals) and the University of Utah Health Sciences Center (3 hospitals). Additionally, Central Utah Clinic has become a data source and two other large clinics, Granger and Tanner, are in the process of connecting to the cHIE. As a result, the cHIE now holds over 700,000 identities (compared to less than 10,000 at this time last year).

The pilot project with the Veterans Administration (VA) to exchange data between Allen Memorial Hospital in Moab and the Grand Junction, Colorado VA Medical Facility where many Moab veterans receive care has moved into production. This pilot project is part of the VLER (Virtual Lifetime Electronic Record) effort to improve healthcare for vets. UHIN and the VA are in the process of expanding the VA connection to include the Salt Lake Veterans Administration Medical Center which provides service to veterans across the state.

The cHIE is successfully addressing the on-going costly challenge payers and providers face with the exchange of clinical health information necessary for administrative purposes, specifically attachments for processing claims and prior authorizations. Avalon Long Term Care Facilities and Medicaid are now using the cHIE to exchange prior authorization information. Previously prior authorizations were processed by certified mail. The cHIE provides a very low cost, secure and guaranteed method of delivering the information as a clinical attachment to Medicaid. UHIN is in the process of rolling this service out to all the Long Term Care organizations in the state. UHIN is exploring additional administrative challenges where cHIE may bring value.

## **❑ Develop a Sustainable Business Model**

Since its inception, UHIN has operated through membership fees. The UHIN formula for determining membership fees first involved a determination of who receives value for the transaction. In the case of the claim, the UHIN board (which was comprised of both payers (group medical plan insurer) and providers) decided that payers received 70% of the value and providers received 30% of the value. The basic idea is that the 'price' of each claim exchanged through UHIN is divided 70-30: each stakeholder group pays for their share of the value received by exchanging that claim. UHIN payers pay a click fee for claims and UHIN providers pay an annual membership fee. UHIN's fees are very competitive in comparison to for-profit clearinghouses that offer similar services and the board believes that UHIN has achieved this mission on administrative exchanges.

UHIN is not-for-profit. UHIN's mission is to reduce the cost of health care to the citizens of Utah. Therefore, as the transaction volume increases UHIN is able to reduce the price for members. The chart below illustrates UHIN's commitment to consistently reduced prices over the years as the administrative transaction volumes have increased.

UHIN Payer Administrative Pricing	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total Claim Transaction Volume (in thousands)	12,454	13,486	13,643	14,068	17,161	22,265	22,492	14,033	14,347
Price Per Claim	\$0.24	\$0.24	\$0.20	\$0.20	\$0.17	\$0.15	\$0.15	\$0.168	\$0.168

In 2008 the UHIN board voted to increase administrative membership fees as the ‘community’ contribution to the \$1M allocated by the Utah legislature and contracted to UHIN by the Utah Department of Health, and the \$1M received through a federal grant, to assist in building the cHIE. UHIN intends to continue with the same business approach to exchange clinical health information through the cHIE, determine the value those exchanging data and work with each stakeholder group to determine an annual membership fee. UHIN has worked closely with clinicians, hospitals and payers, including Medicaid and the state Public Employees Health Plans to build a sustainable business case for the cHIE. The value proposition for the cHIE is that the three identified stakeholder groups; hospitals, clinicians, and payers, equally support the cHIE.

During 2009-2013, UHIN will fully develop and test the proposed cHIE business case with a fee/price structure for all cHIE participating organizations. Negotiation, revision, and compromise are anticipated and expected as part of the normal process to secure a consensus-based business case for cHIE. Early cHIE development and statewide rollout relies on the ARRA funding. It has been UHIN’s goal that by the end of 2012, not to be dependent upon federal or state funds to support the core services of the cHIE. If successful, UHIN, as a non-profit entity, charges for the use of cHIE would cover the operational costs and a small amount for development needs. Additional development includes Meaningful Use HIE functionality necessary for UHIN members to pursue the Meaningful Use Incentive payments under the federal incentive program.

## ❑ Challenges

The primary challenges for cHIE are in gathering ‘consent decisions’ and launching the business model.

The May 2011 UHIN Board decision to require that an active patient consent preference be on file prior to allowing any provider access to the patient’s health data poses significant implementation and sustainability challenges for the cHIE. While UHIN continues its efforts to connect data sources and users to the cHIE, the minimal number of patient consent limits the amount of accessible data to the provider and ultimately the utility of the cHIE. The change in the cHIE consent model poses a serious and significant delay in implementation, provider adoption and utilization thereby jeopardizing the potential to demonstrate value and generate a sustaining business case. It is imperative that Utah focus resources to engage the patient and provider community, educate patients and providers on the benefits and value of participating in cHIE, and implement a consent management strategy.

The collection of patient consent decisions has significantly slowed the adoption rate of the cHIE amongst providers. The collection of consent decisions is hampered by the need to verify the identity of the person who is submitting the consent decision. At this time, UHIN is primarily utilizing clinics to collect consent decisions. Although these clinics are enthusiastic, the process is slow and cumbersome. UHIN is exploring alternative electronic methods for collecting consent decisions to address these concerns.

Until there are large numbers of patients who have consented to share their information through the cHIE, providers will be slow to join, the current value proposition will be difficult to demonstrate as will the current business case.

The consent dilemma must be addressed if cHIE is to succeed. A multi-stakeholder strategy for consent deployment is under development.

### **III. The ARRA HITECH Funds**

The Office of the National Coordinator for Health Information Technology (ONC), Health and Human Services as authorized under Health Information Technology for Economic and Clinical Health (HITECH) 2009 announced several funding opportunities including the Statewide Health Information Exchange Cooperative Agreement Program and Beacon Community Program, federal-state collaborative opportunities to advance the appropriate use of health information technology to improve quality of care and establish a foundation for health care reform. The Utah Department of Health in collaboration with the Utah Health IT Governance Consortium and its 22 statewide organization members coordinated strategic planning efforts to increase Utah's likelihood in securing funding and the opportunity to achieve its goals for improved health care delivery in the state of Utah.

#### **❑ Governor Herbert Designates the State HIT Coordinator**

Robert T. Rolfs is the designated State HIT Coordinator and Utah Department of Health is the accountable agency to coordinate and implement the applications for the Health Information Technology for Economic and Clinical Health (HITECH) Act State Grants to Promote HIT in the Recovery Act of 2009 (ARRA).

#### **❑ Utah HIT Governance Consortium**

The Utah Department of Health organized the Utah HIT Governance Consortium to coordinate ARRA proposals to ensure stimulus funds target Utah's efforts in health reform, economic development, evidence-based assessment and collaboration. See Appendix B Utah HIT Governance Consortium: Vision and Partnership for details.

#### **❑ The State HIT Coordinator Designates the State Health Information Exchange Entity**

With support of the Utah HIT Governance Consortium, the Utah Health Information Network (UHN) was designated “to serve as the accountable entity to implement the Operational Plan” submitted with the Utah application for the State Health Information Exchange Cooperative Agreement Program for the Health Information Technology for Economic and Clinical Health (HITECH) Act Section 3013 State Grants to Promote HIT in the Recovery Act of 2009. See Appendix C for details.

## **❑ Statewide Health Information Exchange (HIE) Cooperative Agreement (CA) Program**

The Utah Department of Health and the Utah Health Information Network (UHN), in collaboration with and support of the Utah Health IT Governance Consortium and its 22 statewide organization members submitted the State Clinical Health Information Exchange (cHIE) Cooperative Agreement Program.

The vision of the cHIE is to improve the quality of care and reduce the cost of care by “connecting the dots” in Utah. The small number of other successful HIE efforts around the country illustrate that “connecting the dots” – making more complete health information available at the point of service –significantly impact the community including: reduced number of prescriptions<sup>2</sup>, reduced cost of care<sup>3</sup>, reduced duplicate tests<sup>4</sup>, and gaining administrative efficiencies<sup>5</sup> and a reduction in adverse drug reactions<sup>6</sup>. The key advantage to using a cHIE is that it does not matter whether or not the patient has insurance. It only matters that the patient receive care and that the provider giving that care be a participating entity in the cHIE. Therefore, patients without insurance will benefit from coordination of care.

A fully-implemented and efficiently utilized cHIE in Utah will make significant inroads in our goals to reduce the cost of care while improving the quality. A fully operational cHIE could also provide the infrastructure for quality reporting to support quality improvement and health payment reform. UHN and UDOH are working with many other organizations<sup>7</sup> across Utah to coordinate the cHIE roll out during the course of the Statewide HIE CA program.

The goal of the Utah Statewide HIE Program is to implement the statewide exchange of clinical health information for improved health care delivery in the state of Utah. The federal HIE funding will enable Utah to achieve the following objectives:

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<sup>2</sup> Report in *Modern Healthcare*, February 18, 2008, Florida Agency for Health Care Administration, “Florida 2007 Electronic Prescribing Report.” January 2008

<sup>3</sup> V. Willey, Gregory, “An Economic Evaluation of Use of a Payer-Based EHR within an Emergency Department,” *HealthCore*, vol. July, 2006.

<sup>4</sup> T. Matthews, Senior Policy Advisor, Kentucky Cabinet Health and Family Services, “States Make Plans for Health IT to Improve Quality, Lower Costs,” The Council of State Governments 2007.

<sup>5</sup> J. Conn, “RHIOs Make It Work,” in *Modern Healthcare*, 2006.

<sup>6</sup> M. Kolbasuk McGee, “Why Progress Toward Electronic Health Records is Worse Than You Think,” in *InformationWeek*, 2007.

<sup>7</sup> Utah Medical Association, the Utah Hospital Association, the Utah Pharmacists Association, the Utah Nurse Practitioner and Physician Assistant Association, the Association for Utah Community Health, HealthInsight, and the American Association for Retired Persons, the Utah Home Health Care Association have actively supported the cHIE.

- 1) Connect a preponderance of healthcare providers - defined as 80% or more of the healthcare entities in the state of Utah - to the clinical HIE to exchange clinical health information for treatment purposes at the point of care ("*Connections*");
- 2) Expand the clinical HIE services to include electronic prescribing, laboratory ordering and result delivering, and medication history to provide better quality and cost-effective health services and to support providers to meet federal meaningful use requirements ("*Expanded HIE Services*");
- 3) Develop a sustainable governance and business model to operate the clinical HIE ("*Sustainability*");
- 4) Conduct ongoing strategic planning and evaluation in order to implement initiatives that efficiently use technology to transform the health care delivery system ("*Planning and Evaluation*"); and
- 5) Integrate public health data exchange with clinicians to reduce burden on providers, increase timely and completed reporting, and protect population health ("*Public Health*").

## **□ The Statewide Strategic Plan**

The State of Utah will lead the statewide strategic planning effort to assure proper governance to protect the public interests and coordinate resources to develop the clinical HIE. The CHIE governance will follow a community-driven, consensus-based non-profit business model that uses an incremental development strategy. The public-private governance model Utah is proposing is a newly articulated concept. Aspects of the model will evolve with the implementation of the Statewide HIE CA Program. Through the course of the program the HIT Consortium will further define the scope and content of the state's HIE accountability; develop process and procedures to assure accountability; establish procedures for HIE transparency; expand public participation through open meetings, public hearings, public postings; and monitor evaluate and report on progress in fully implementing the CHIE in Utah.

The CHIE is intended to serve Utah residents who actively choose to participate in the clinical HIE. At the point of care Individuals/consumers receive information about the CHIE and the ability to select to participate or not participate by consenting to share their health information with their treating provider through the statewide exchange. Improvements in Utah's statewide electronic connectivity and interoperability among healthcare providers is expected to result in appropriate and secure clinical health information sharing and improved care coordination and patient health.

Utah documents its efforts and publicly shares project publications. Through evidence-based evaluation, we expect to achieve the following outcomes: improved efficiency of the health care delivery system, reduced medication errors, timely and accurate care coordination and better quality care for people of Utah. We also expect to create a private-public collaborative business model, the clinical HIE, and to efficiently use health information technology and exchange to transform today's healthcare delivery system to support national healthcare reform. See Appendix D for details.

## ❑ The Statewide Operational Plan

UHN, as the state-designated HIE, will implement, operate, and sustain the clinical HIE. UHN rigorously protects all the health data that it transports and it requires that members comply with HIPAA privacy and security regulations and any applicable state laws. UHN's business plan reflects the character of the Utah healthcare marketplace. All cHIE planning is open and consensus-based and represents the Utah provider market and Utah insurer market. UHN works closely with the provider and payer entities and has their support for the cHIE.

The cHIE utilizes secure, hybrid federated, database web services architecture. The cHIE solution will handle HIE traffic between health care entities within the State. The patient/consumer makes an informed decision at the point of care about who can access and exchange their information via the statewide HIE. For entities – Intermountain Healthcare, the University of Utah Health Sciences Center, Central Utah Clinic, that utilize internal HIE, the cHIE is not intended to replace or supplant that functionality. See Appendix E for details.

Activities and or services UHN is pursuing as part of the State-designated HIE to improve health care efficiency:

- Controlled Substances Database: Connect to cHIE providers. Streamlining the process may result in reduced duplication or over-prescribing of controlled substances. This is a challenging project but an important one.
- Newborn Screening Test Orders: Create a standardized electronic method for hospitals to submit newborn blood spot screening orders to the State Laboratory. Currently this is a manual process and is not conducive to a simple routine reconciliation process by the hospitals.

Activities planned for the future include:

- cHIE use in prisons and jails: Explore the use of the cHIE within prisons and jails, to thereby contribute to improving the quality of and reducing health care costs to these systems.
- Coordination of Benefits (COB): Comprehensive payer data like the All Payer Claims Database (APCD) may populate a comprehensive coordination of benefits/eligibility data base for use by Medicaid, commercial payers, and providers to determine a patient's group medical insurance coverage from a single source. Currently this is a labor intensive process conducted by payers and providers alike that could be considerably simplified, thereby reducing costs.

## IV. Beacon Community Program

In May, 2010, Utah was named one of 15 Beacon Communities by the Office of the National Coordinator for Health Information Technology. This effort, "Improving Care through Connectivity and Collaboration" (IC<sup>3</sup>) engages key partners (healthcare providers, public health, policy makers and data organizations) within Salt Lake, Summit and Tooele Counties to improve the health and healthcare of the community, improve the efficiency and of care, and enable better integration between primary care and public health. The cHIE in support of the Beacon Community provides medical professionals a way to share and view patient information in a secure electronic manner. This information is accessible, with patient consent, to authorized cHIE users

while maintaining the highest standards of security and patient privacy. Beacon is working with cHIE to improve consent collection in the 68 Beacon clinic sites.

## **V. Challenges**

HIT in and of itself is not the solution to health reform. Providers, payers and consumers face many challenges as the Utah health care industry moves forward to make comprehensive medical information more accessible to providers at the point of care (with patient permission). Providers need assistance to build and effectively use their EHR connections to the cHIE. Practicing physicians require resources and time to acquire/understand the technology, learn how to use it to accomplish what they currently do (i.e., see patients efficiently), and, most importantly, to use it to improve practice and care. Additionally, the current economic and national political landscape challenges providers to balance limited resources among mandated responsibilities and emerging HIE accountability.

The primary short-term challenge facing the cHIE is in resolving the consent challenge. This requires streamlining the consent process to ease the burden on patients' and providers' responsibilities for collecting the consent and convincing patients and providers of the value of the cHIE. As one UHIN board member states, "if doctors don't use it nothing else matters". Additionally, without the patient consenting to their provider accessing the patient's health information in the CHIE, no information exists for the provider to use. UHIN must convince physicians and other health care providers that using the cHIE will improve their practices, both financially and in the simplification of work flow. Likewise consumers/patients must be convinced of the benefit in providing their health care provider with complete and accurate medical information. Engaging the patient is an imperative if Utah's CHIE is to survive given the current model.

Further, to assure long-term commitment, participants need evidence that the cHIE system provides a benefit whether it is in savings over time (especially payers and policy makers), or in improved coordination and care (public). The cHIE aligns various technical efforts under a unique comprehensive Utah strategy to promote the meaningful use of implemented health IT among all participating providers for improved health care quality, coordination of care and reduced health care cost.

## APPENDICES

- A. Governor Herbert's Letter to Designate the State HIT Coordinator  
<http://health.utah.gov/phi/ehealth/Gov%20Letter.pdf>
- B. Utah HIT Governance Consortium: Statewide Vision and Partnership  
[http://health.utah.gov/phi/Utah%20HIT%20Governance%20Consortium\\_Final.pdf](http://health.utah.gov/phi/Utah%20HIT%20Governance%20Consortium_Final.pdf)
- C. The State HIT Coordinator's Letter to Designate the State HIE Entity  
<http://www.health.utah.gov/phi/ehealth/Jan%20Roots%20Letter.pdf>
- D. Utah Statewide Clinical Health Information Exchange Strategic Plan. Adopted, October 12, 2009. Salt Lake City, Utah. [http://health.utah.gov/phi/UT\\_HIE\\_StrategicPlans\\_Final\\_2009.pdf](http://health.utah.gov/phi/UT_HIE_StrategicPlans_Final_2009.pdf)
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