Health Information Technology/ Health Information Exchange

Statewide Status Report and Plan

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Commissioner

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Introduction and Background

The Health Information Technology Exchange of Connecticut (HITE-CT), a quasi-public agency, was created by the 2010 Connecticut General Assembly, was sunset effective June 30, 2014, and the responsibilities[1] for Health Information Technology (HIT) and Health Information Exchange (HIE) were transferred to the Department of Social Services (DSS) via Public Act 14-217 (Bill 5597 as adopted—see Appendix A). The state's goal is to adopt and advance the use of national standards that support secure data exchanges and enhance interoperability to support the most optimal health outcomes possible.

This status report and plan is provided to the General Assembly's Appropriations, Human Services and Public Health Committees, pursuant to Public Act 14-217, Section 175(e).

State of HIT Adoption

As of December 2014, the State of Connecticut had received nearly $300 million through the EHR incentive program administered through CMS. Almost 5,636 eligible professionals and all hospitals have received payments for adoption of EHRs and many have attested to achieving Meaningful Use Stage 1.

A physician survey was completed in 2011 and 2013 totalling 1,346 responses. Between 68-74% of the physicians are either using EHRs or are in the process of implementing EHRs --an increase from 53-56% of physicians in 2011.[2] The rate of EHR adoption is projected to exceed 75% by the year 2015 based on the trends. E-prescribing activities increased from 2011 to 2013 among pharmacies and prescribers. Ninety-six percent (96%) of the pharmacies were enabled for processing e-prescriptions and 62% of the prescribers were e-prescribing.[3] In 2013, 63% of the Connecticut's hospitals were sharing lab results electronically, higher than the national average of 56%.[4] This represents a significant decrease from 77% in 2011-12. Fifty percent (50%) of the independent labs were sending lab results electronically in 2013, an increase from 37% in 2011-12. Due to the low number of labs that responded to our survey, the results should be interpreted with caution. Currently, Connecticut does not have an operational statewide HIE.

Based on a Connecticut resident survey completed in 2013[5], 54% of the participants described their health as excellent or very good, 89% of participants were satisfied with the care they received from their doctor or physician's assistant and 87% of participants said they understood what their doctor said to them during their last visit. When asked about their views on the use of HITs in improving care 83% of participants had heard about electronic medical records, 72% supported a national HIE that

[1] HITE-CT was established by legislative mandate effective January 1, 2011, to develop, implement, and monitor state-level Health Information Exchange (HIE) in order to meet the state's strategic objectives of improved health care outcomes and efficiency through the secure exchange of clinical and administrative health data (Public Act 10-117)

[2] Tikoo M, Costello D. *Evaluating Connecticut's Health Information Technology Exchange: Physician Survey Report.* Farmington, CT: University of Connecticut Health Center; 2014

[3] Tikoo M, Costello D. *Evaluating Connecticut's Health Information Technology Exchange: Physician Survey Report.* Farmington, CT: University of Connecticut Health Center; 2014

[4] Tikoo M, Roy A. *Evaluating Connecticut's Health Information Technology Exchange: Laboratory Survey Report.* Farmington, CT: University of Connecticut Health Center; 2014.

[5] Tikoo M, Costello D. *Evaluating Connecticut's Health Information Technology Exchange: Consumer Survey Report.* Farmington, CT: University of Connecticut Health Center; 2014.

was driven by patient consent, and 64% expressed support for an "opt-in" and 21% supported "opt-out" consent model.

Technology Assets

The following enterprise solutions have been procured by the state and are being deployed at Bureau of Enterprise Systems and Technology (BEST) and are fundamental to supporting a quality data infrastructure that is essential for enhanced care delivery and payment reform. These are also building blocks for operating a statewide health information exchange.

1. A standards based Health Provider Directory
2. Enterprise Master Patient Index
3. A Health Information Service Provider service for Direct Messaging (DM)

We are promoting the use of DM protocol to send messages between providers and/or systems to enhance care-coordination for an array of program services (e.g., long term post-acute care provider network, durable medical equipment) by ensuring exchange of documents (e.g. discharge summary, assessments, orders, and continuity of care documents).

Currently, DSS is working with CMS to provide a Personal Health Record (PHR) to Medicaid beneficiaries through a demonstration grant. DSS plans to use Quality Reporting Document Architecture (QRDA) Category III and Category I standards for receiving eClinical Quality Measures as one option in their EHR Incentive program[6]. Lastly, the state will use a federated approach to review/produce provider/organization/state-level data quality[6] enabled by edge-server based indexing technology. This helps mediate differences between small and large provider groups. All HIT assets will be available to other interested parties for re-use through a shared cost arrangement. The technologies and systems are designed for scaling to enterprise requirements.

HIT and HIE Strategy

Currently, the Department of Social Services (DSS) is building upon the existing HIT Strategic and Operational Plan and the recommendations of the technology work group[6] to 1) adopt industry standards for data exchange; 2) promote reusable components through standard interfaces and modularity; 3) promote efficient and effective data sharing to meet stakeholders needs; 4) provide a beneficiary-centric focus; 5) promote interoperability, integration and an open architecture; 6) promote secure data exchange; and 7) promote good practices (e.g.: The Capability Mature Model and data warehouse)

DSS is working with other health and human services delivery agencies (DPH, DDS, DMHAS, DCF, DOC, and others) through six-planning meetings that started in October 2014 and will conclude in March 2015, resulting in an updated cross-agency HIT strategic plan for the state.

As of this reporting the group has met five times and has created a vision, mission, performance objectives, HIT Framework and Governance structure. This is being followed by a MOA that is being signed among agencies that are agreeing to work together to implement this plan provided funding is made available. The following agencies have participated in this work:

[6] Integrating Connecticut's Health Information Technology: A White Paper prepared by the Health Technology Workgroup of the Connecticut Health Care Cabinet, August 29, 2012. http://www.healthreform.ct.gov/ohri/lib/ohri/HealthTechnologyWorkGroupFinalReportRecommendations.pdf

- Chief Information Officer, State of Connecticut
- Commissioner, Department of Social Services
- Commissioner, Department of Children and Families
- Commissioner, Department of Consumer Protection
- Commissioner, Department of Developmental Services
- Commissioner, Department of Public Health
- Commissioner, Department of Mental Health and Addiction Services
- Commissioner, Department of Correction
- Commissioner, Department of Veterans Affairs
- Chief Executive Officer, Access Health Connecticut
- Secretary, Office of Policy and Management
- State Health IT Coordinator, Department of Social Services

Vision

Empower individuals and those that provide health resources to achieve better health outcomes through improved access to secure and private health information.

Mission

Develop a Health Information Technology framework, based on shared values across state agencies.

CT HIT Goals

Business

Enable access to a personal health record that is based on standards, is safe and supports informed decision-making

Measures of Success	Objectives	Action Steps
Reduction of health disparities	Enable a healthcare service environment that supports Quality Care (The Institute of Medicine Model), which includes efficiency, effectiveness, timeliness, safety, patient centered and equitable	i. Develop detailed project plan ii. Produce rapid cycle evaluation to support continuous learning & improvement iii. Develop and implement on-line application / enrollment

Information

Enable individuals to manage their health by providing access to the PHI to support self-management

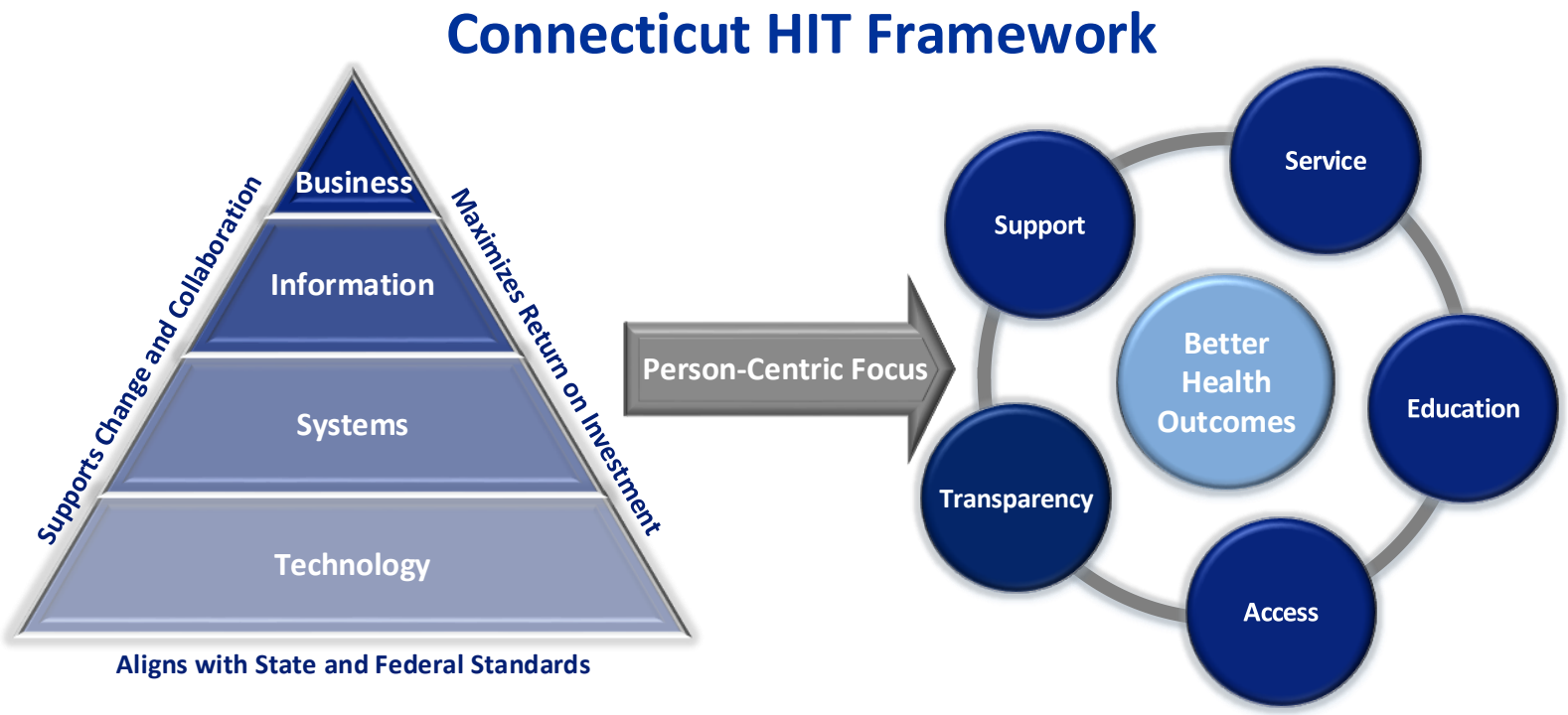
Measures of Success	Objectives	Action Steps
Improved management of personal health goals and objectives	Promote technology development that incorporates citizen self-service portals	i. Promote data sharing among CT HHS agencies ii. Develop guidelines for technology development that promote improved citizen access to and management of their PHI

Systems/Technology

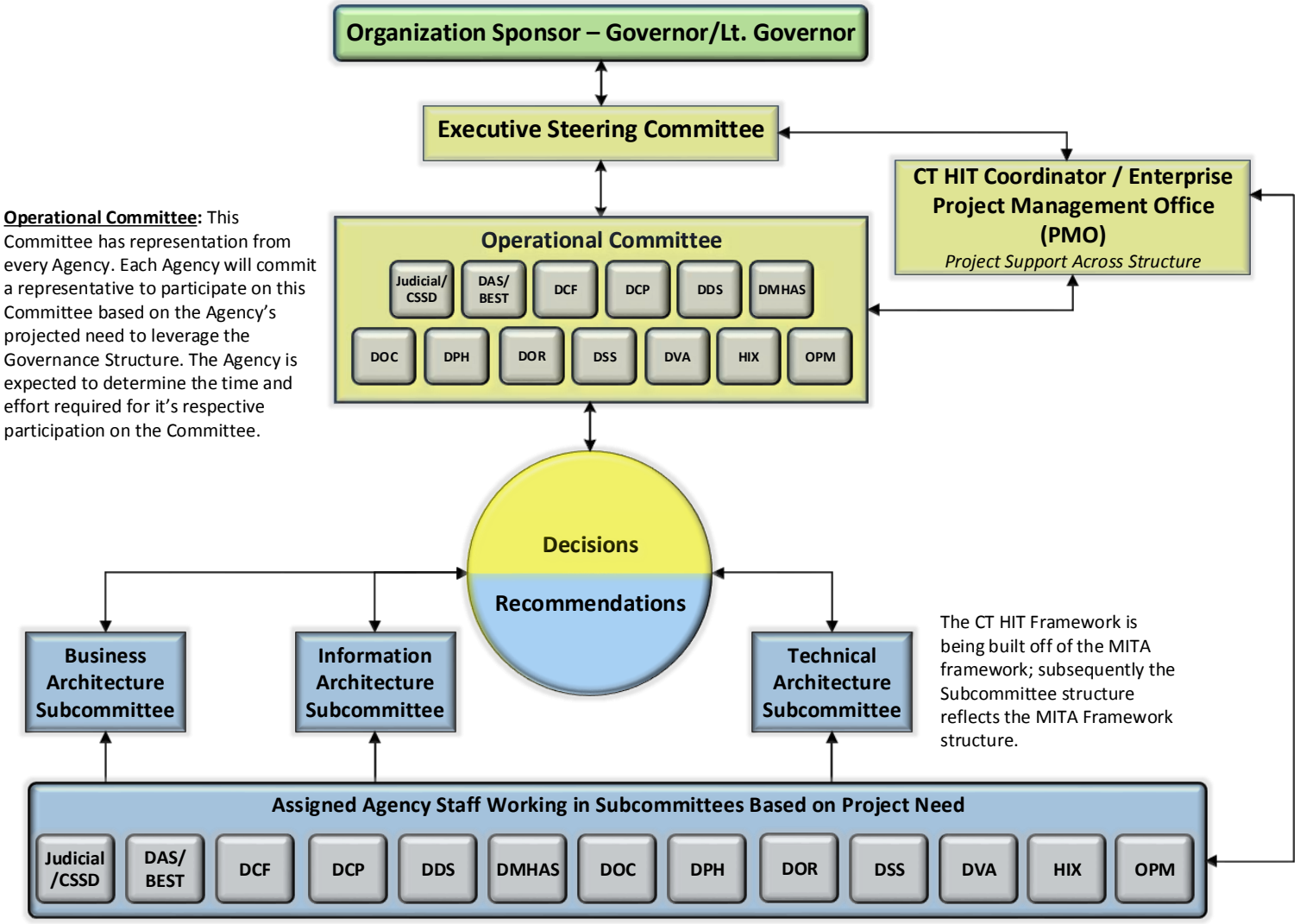
Clearly articulate an integration approach that leverages existing technology to move toward upgradeable, supportable, and reliable shared platforms that are cost-effective and sustainable.

Measures of Success	Objectives	Action Steps
Information supports dual-use	To align projects with Business, Information and Technical Architectures that support the CT HIT Governance	i. By 7/1/15 establish a central (enterprise) PMO ii. Facilitate patient provider communication iii. Support informative/reporting need

CT Shared Vision Statement Graphic



CT HIT Governance Framework



Operational Committee: This Committee has representation from every Agency. Each Agency will commit a representative to participate on this Committee based on the Agency's projected need to leverage the Governance Structure. The Agency is expected to determine the time and effort required for it's respective participation on the Committee.

The CT HIT Framework is being built off of the MITA framework; subsequently the Subcommittee structure reflects the MITA Framework structure.

Funding and Expenditures

While the Public Act 14-217 established the HIT/HIE authority with DSS, it did not provide any state funding to support these activities. But, it does provide the Commissioner of DSS the ability to submit requests for funding to the Secretary of OPM.

Achievements

Since the sunset of HITE-CT in June 30, 2014, DSS has made significant progress on the HIT/HIE path in Connecticut. We have collaborated to create our vision, mission, and goals, as well as a framework that we all agree to use as we built our HIT Framework.

Planning: We are almost finishing the refresh of our statewide Health Information Technology Strategic and Operational Plan. The focus was to:

1. Create a HIT vision statement for our state;
2. Identify common HIT goals;
3. Identify and support an enterprise built on an interoperability framework; and
4. Operationalize a cross-agency IT governance structure that builds upon and ties the various initiatives that have been undertaken in the last four years with respect to health and human services.

Integrated Eligibility System: DSS and Access Health CT, the state's health insurance exchange, have developed an integrated eligibility system for Medicaid, the Children's Health Insurance Program and private qualified health plans under the Affordable Care Act. DSS is also planning and implementing a new eligibility management system ('ImpaCT') to replace our antiquated legacy system and to serve as a platform for eventual linkage of human service agencies across the state government enterprise.

Enterprise Assets: DSS, along with DAS/BEST, is in the process of standing up an Enterprise Master Patient Index (eMPI) and a Provider Directory. Both of these assets were procured by HITE-CT and have been transferred to DSS for use within the enterprise. We would like to initiate a discussion with organizations interested in uni- or bi-directional exchange of provider directory feeds on a regular basis. There will be a cost-share associated with this service for bi-directional feeds. Our vendor for both EMPI and Provider Directory is NextGate (www.nextgate.com/).

Medicaid Electronic Health Records Incentive Program – As of December 2014, DSS has distributed over $78 million in payments to over 1753 Eligible Professionals (EPs) and 28 eligible hospitals.

1. Direct Exchange – On April 23, 2014, DSS stood up a Health Information Service Provider (HISP) to provision Direct mailboxes for EPs participating in this program. A one-year free subscription is being provided to the EPs, renewable at cost after the first year. As of February 2015, we have reached out to over 1800 providers and, of these, 56 Direct mailboxes have been set-up. Use of Direct messaging will help EPs exchange transfer of care summaries with long-term care facilities that may not have access to CEHRs.
2. Electronic Clinical Quality Measures (eCQMs): This year we are focusing on the eCQMs and working with providers to explore ways of sending these data using defined standards, such as Quality Reporting Document Architecture (QRDAs) category I and III. Additionally, we really want to minimize moving data but ensuring timely access to data for reporting and audits. To this end we have purchased a technology (http://zatohealth.com/) to collect Meaningful Use (MU) measures (Stage 1 and Stage 2) as they relate to the Medicaid EHR incentive program. In a very simplistic way, this technology uses indices and edge servers to give us access to the MU

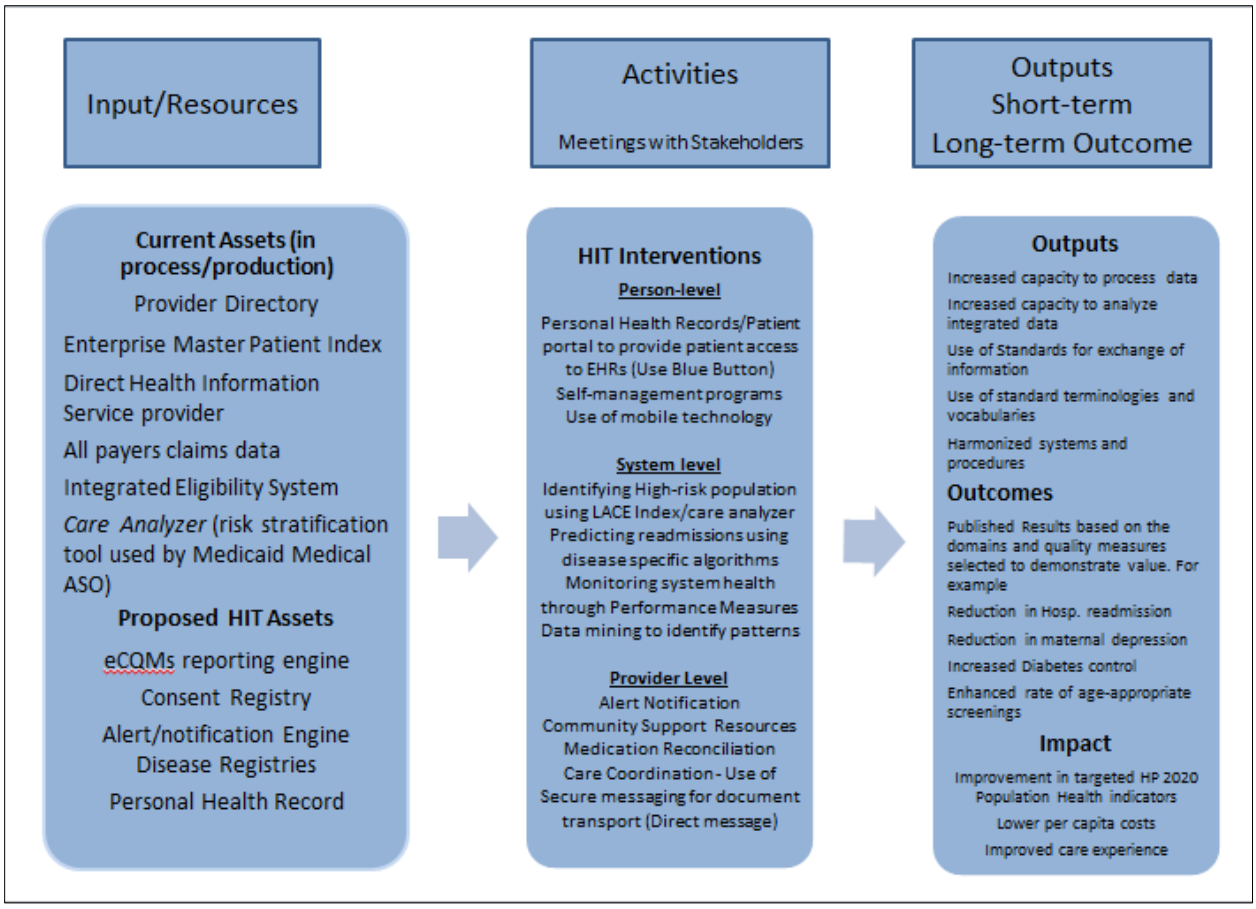
data without an agency needing to send it to us. Let me know if you would be interested in a preliminary discussion with our team.

Personal Health Records (PHRs) - DSS was the recipient of a demonstration grant for **Testing Experience and Functional Assessment Tools (TEFT)**. This four-year initiative is comprised of four components, of which two are related to HIT; namely, testing the use of Personal Health Records (PHRs) among the community-based long-term services and supports (LTSS) and aiding the development and testing of the eLTSS content and transport standard. This grant began on May 1, 2014, and the first year is the planning year. We have held five town hall meetings to date and another 5 are planned for in the remaining part of this fiscal year.

Website: DSS launched a health IT website that is updated at least once and month. Information related with all HIT initiatives kept updated on this website. Please visit us at http://www.ct.gov/cthealthit.

Planned Activities or Fiscal Year 2016

We plan to continue on the path that has been created by the recent HIT Strategic Planning process. The following logic model explains what we are planning to undertake and the gains that we want to make in health outcomes.



In summary, our recommended next steps are as follows:

- Create a Health Information Exchange plan that is supported by state and federal funds as appropriate. Set aside funds so that DSS can leverage funding for HIE through the 90/10 provision. This is available to the state only till 2021.
- Continue to work with health care providers and other state agencies to identify additional use cases for the Provider Directory (e.g., work with the All Payer Claims Database group regarding use of the Provider Directory stood up by HITE-CT).
- Continue to work across state agencies to realize the benefits of information sharing to help

The potential benefits of having an operational Health Information Exchange are:

- Improved patient care coordination and, as a result, a better quality of life for its citizens
- Reduction in unnecessary tests, procedures
- Reduction in medical error and missed diagnosis
- Opportunities for improved quality reporting, public health surveillance, and cost reductions for both public and private payers

The most significant beneficiary is the patient, since the HIE will allow patients to be more engaged in their health care and will assist providers in delivering a higher quality of care while reducing costs. HIE is an essential component in the evolving state and national health care landscape.

Appendix A

Public Act No. 10-117

General Assembly

Bill No. 5597

February Session, 2014

LCO No. **5472**

Referred to Committee on No Committee Introduced by:
REP. SHARKEY, 88th Dist. SEN.
WILLIAMS, 29th Dist.

AN ACT IMPLEMENTING PROVISIONS OF THE STATE BUDGET FOR THE FISCAL YEAR ENDING JUNE 30, 2015.

...

Sec. 169. Subdivision (12) of section 1-79 of the 2014 supplement to the general statutes is repealed and the following is substituted in lieu thereof (*Effective July 1, 2014*):

(12) "Quasi-public agency" means Connecticut Innovations, Incorporated, **[**and**]** the Connecticut Health and Education Facilities Authority, the Connecticut Higher Education Supplemental Loan Authority, the Connecticut Student Loan Foundation, the Connecticut Housing Finance Authority, the State Housing Authority, the Connecticut Resources Recovery Authority, the Capital Region Development Authority, the Connecticut Lottery Corporation, the Connecticut Airport Authority, **[**Health Information Technology Exchange of Connecticut,**]** the Connecticut Health Insurance Exchange and the Clean Energy Finance and Investment Authority.

Sec. 170. Subdivision (1) of section 1-120 of the general statutes is repealed and the following is substituted in lieu thereof (*Effective July 1, 2014*):

(1) "Quasi-public agency" means Connecticut Innovations, Incorporated, and the Connecticut Health and Educational Facilities Authority, Connecticut Higher Education Supplemental Loan Authority, Connecticut Housing Finance Authority, Connecticut

Housing Authority, Connecticut Resources Recovery Authority, Capital Region Development Authority, Connecticut Lottery Corporation, Connecticut Airport Authority, **[**Health Information Technology Exchange of Connecticut,**]** Connecticut Health Insurance Exchange and Clean Energy Finance and Investment Authority.

Sec. 171. Section 1-124 of the general statutes is repealed and the following is substituted in lieu thereof (*Effective July 1, 2014*):

(a) Connecticut Innovations, Incorporated, the Connecticut Health and Educational Facilities Authority, the Connecticut Higher Education Supplemental Loan Authority, the Connecticut Housing Finance Authority, the Connecticut Housing Authority, the Connecticut Resources Recovery Authority, **[**the Health Information Technology Exchange of Connecticut,**]** the Connecticut Airport Authority, the Capital Region Development Authority, the Connecticut Health Insurance Exchange and the Clean Energy Finance and Investment Authority shall not borrow any money or issue any bonds or notes which are guaranteed by the state of Connecticut or for which there is a capital reserve fund of any kind which is in any way contributed to or guaranteed by the state of Connecticut until and unless such borrowing or issuance is approved by the State Treasurer or the Deputy State Treasurer appointed pursuant to section 3-12. The approval of the State Treasurer or said deputy shall be based on documentation provided by the authority that it has sufficient revenues to (1) pay the principal of and interest on the bonds and notes issued, (2) establish, increase and maintain any reserves deemed by the authority to be advisable to secure the payment of the principal of and interest on such bonds and notes, (3) pay the cost of maintaining, servicing and properly insuring the purpose for which the proceeds of the bonds and notes have been issued, if applicable, and (4) pay such other costs as may be required.

(b) To the extent Connecticut Innovations, Incorporated, and the Connecticut Higher Education Supplemental Loan Authority, Connecticut Housing Finance Authority, Connecticut Housing Authority, Connecticut Resources Recovery Authority, Connecticut Health and Educational Facilities Authority, **[**the Health Information Technology Exchange of Connecticut,**]** the Connecticut Airport Authority, the Capital Region Development Authority, the Connecticut Health Insurance Exchange or the Clean Energy Finance and Investment Authority is permitted by statute and determines to exercise any power to moderate interest rate fluctuations or enter into any investment or program of investment or contract respecting interest rates, currency, cash flow or other similar agreement, including, but not limited to, interest rate or currency swap agreements, the effect of which is to subject a capital reserve fund which is in any way contributed to or guaranteed by the state of Connecticut, to potential liability, such determination shall not be effective until and unless the State Treasurer or his or her deputy appointed pursuant to section 3-12 has approved such agreement or agreements. The approval of the State Treasurer or his or her deputy shall be based on

documentation provided by the authority that it has sufficient revenues to meet the financial obligations associated with the agreement or agreements.

Sec. 172. Section 1-125 of the general statutes is repealed and the following is substituted in lieu thereof (*Effective July 1, 2014*):

The directors, officers and employees of Connecticut Innovations, Incorporated, and the Connecticut Higher Education Supplemental Loan Authority, Connecticut Housing Finance Authority, Connecticut Housing Authority, Connecticut Resources Recovery Authority, including ad hoc members of the Connecticut Resources Recovery Authority, Connecticut Health and Educational Facilities Authority, Capital Region Development Authority, **[**the Health Information Technology Exchange of Connecticut,**]** Connecticut Airport Authority, Connecticut Lottery Corporation, Connecticut Health Insurance Exchange and the Clean Energy Finance and Investment Authority and any person executing the bonds or notes of the agency shall not be liable personally on such bonds or notes or be subject to any personal liability or accountability by reason of the issuance thereof, nor shall any director or employee of the agency, including ad hoc members of the Connecticut Resources Recovery Authority, be personally liable for damage or injury, not wanton, reckless, wilful or malicious, caused in the performance of his or her duties and within the scope of his or her employment or appointment as such director, officer or employee, including ad hoc members of the Connecticut Resources Recovery Authority. The agency shall protect, save harmless and indemnify its directors, officers or employees, including ad hoc members of the Connecticut Resources Recovery Authority, from financial loss and expense, including legal fees and costs, if any, arising out of any claim, demand, suit or judgment by reason of alleged negligence or alleged deprivation of any person's civil rights or any other act or omission resulting in damage or injury, if the director, officer or employee, including ad hoc members of the Connecticut Resources Recovery Authority, is found to have been acting in the discharge of his or her duties or within the scope of his or her employment and such act or omission is found not to have been wanton, reckless, wilful or malicious.

Sec. 173. Section 4-60i of the general statutes is repealed and the following is substituted in lieu thereof (*Effective July 1, 2014*):

(a) The Commissioner of Social Services shall (1) develop, throughout the Departments of Developmental Services, Public Health, Correction, Children and Families and Mental Health and Addiction Services, uniform management information, uniform statistical information, uniform terminology for similar facilities, uniform electronic health information technology standards and uniform regulations for the licensing of human services facilities, (2) plan for increased participation of the private sector in the delivery of human services, (3) provide direction and coordination to federally funded programs in the human services agencies and recommend uniform system

improvements and reallocation of physical resources and designation of a single responsibility across human services agencies lines to eliminate duplication.

(b) The Commissioner of Social Services shall, in consultation with the Departments of Public Health and Mental Health and Addiction Services, implement and periodically revise the state-wide health information technology plan established pursuant to section 19a-25d and shall establish electronic data standards to facilitate the development of integrated electronic health information systems, as defined in subsection (a) of section 19a-25d, for use by health care providers and institutions that receive state funding. Such electronic data standards shall: (1) Include provisions relating to security, privacy, data content, structures and format, vocabulary and transmission protocols; (2) limit the use and dissemination of an individual's Social Security number and require the encryption of any Social Security number provided by an individual; (3) require privacy standards no less stringent than the "Standards for Privacy of Individually Identifiable Health Information" established under the Health Insurance Portability and Accountability Act of 1996, P.L. 104-191, as amended from time to time, and contained in 45 CFR 160, 164; (4) require that individually identifiable health information be secure and that access to such information be traceable by an electronic audit trail; (5) be compatible with any national data standards in order to allow for interstate interoperability, as defined in subsection (a) of section 19a-25d; (6) permit the collection of health information in a standard electronic format, as defined in subsection (a) of section 19a-25d; and (7) be compatible with the requirements for an electronic health information system, as defined in subsection (a) of section 19a-25d.

Sec. 174. Section 4-60j of the general statutes is repealed and the following is substituted in lieu thereof (*Effective July 1, 2014*):

In fulfilling his or her responsibilities under sections 4-60i and 4-60*l* and complying with the requirements of section 19a-25d, the **[**commissioner**]** Commissioner of Social Services shall take into consideration such advice as may be provided to the commissioner by advisory boards and councils in the human services areas.

Sec. 175. Section 4-60*l* of the general statutes is repealed and the following is substituted in lieu thereof (*Effective July 1, 2014*):

(a) Matters of policy involving more than one of the agencies designated in section 4-60i shall be presented to the **[**commissioner for his**]** Commissioner of Social Services for his or her approval prior to implementation.

(b) Matters of program development involving more than one of the agencies designated in section 4-60i shall be presented to the commissioner for his or her approval prior to implementation.

(c) Any plan of any agency designated in section 4-60i for the future use or development of property or other resources shall be submitted to the commissioner for his or her approval prior to implementation.

(d) Any plan of any agency designated in section 4-60i for revision of the health information technology plan shall be submitted to the commissioner for his or her approval prior to implementation. If such approval requires funding, after the commissioner has granted approval, the commissioner shall submit such revisions to the Secretary of the Office of Policy and Management.

(e) On or before January 1, 2015, and annually thereafter, the commissioner shall submit, in accordance with the provisions of section 11-4a, the state-wide health information technology plan, as revised in accordance with section 4-60i, to the joint standing committees of the General Assembly having cognizance of matters relating to human services, public health and appropriations and the budgets of state agencies

...

Sec. 259. Sections 10a-203, 19a-402, 19a-750 to 19a-754, inclusive, and 27-138d of the general statutes are repealed. (*Effective July 1, 2014*)