STATE OF CONNECTICUT
Health and Human Services

Connecticut HealthIT

Strategic & Operational Plan

DEVELOPING A SHARED VISION
FOR
GOVERNANCE

August 2015

55 Farmington Avenue – Hartford – Connecticut 06105

Table of Contents

Introduction 1
Why Invest in HealthIT Infrastructure? 1
What has Connecticut done to build HealthIT infrastructure? 2
Background - Connecticut's HealthIT Landscape 3
Consumer Perspective 3
Health IT Assets and On-going Initiatives 4
Connecticut's Health Foci 6
Work Accomplished via Public Act 14-217 8
Purpose 8
CT HealthIT – Planning Process 8
Results of the planning process 9
CT HealthIT Governance 12
CT HealthIT Goals and Objectives 14
Operational Priorities, Funding Considerations, and Sustainability 15
Operational Priorities - 2015 15
Funding/Budget/Sustainability 15
Next Steps 18
CT HealthIT Logic Model 18
Establishing the State Health IT Advisory Committee 19
Policy 19
Staffing/Capacity 19
Risks / Risk Mitigation 19
Appendices 20
Appendix A – CT HealthIT Workgroup Members 20
Appendix B – Methodology 21
Appendix C – Committee Roles and Responsibilities 26
Appendix D – Public Act 15-146 (Sections 20-26) 28
Appendix E – Interagency Agreement (Under Revision) 38

Introduction

The U.S. Department of Health and Human Services (HHS) has developed a Ten-Year vision to achieve an interoperable health information technology (Health IT) Infrastructure to achieve the national vision of a healthcare delivery system that is more patient-centered, more effective and less costly. HHS encourages states to adopt Health IT that makes the right data available to the right people at the right time across products and organizations in a way that is reliable and actionable.[1] Specifically, the federal government has supported use of technologies such as certified electronic health records, e-prescribing, personal health records and health information exchanges (HIE). These Health IT initiatives are core components of state Health IT strategic and operational plans.

Why Invest in Health IT Infrastructure?

The potential benefits of having an operational statewide Health Information Technology (Health IT) infrastructure that supports a statewide HIE include:

- Improved patient care coordination;
- better health outcomes;
- Reduction in unnecessary tests and procedures;
- Reduction in medical error;
- Opportunities for improved quality reporting and public health surveillance; and
- Cost reductions for both public and private payers.

A reliable and secure statewide Health IT infrastructure will benefit the citizens of Connecticut as well as assist providers in delivering better care while reducing costs. HIE's can allow people to be informed and engaged in their health care. Consumer engagement will play a critical role in the adoption of Health IT and HIE and in their potential to generate lasting improvements the U.S. health care system.[2] Unless consumers are willing and able to participate in HIEs, the expected gains to the health care system may never be realized despite billions of dollars in government investments. The Health Information Technology for Economic and Clinical Health (HITECH) Act aims to "improve health care and make it patient-centric through the creation of a secure, interoperable nationwide information network. A key premise is that information should follow the patient, and artificial obstacles – technical, bureaucratic, or business related – should not be a barrier to the seamless exchange of information." HIE is an essential component in the evolving state and national health care landscape.

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[1] U.S Department of Health and Human Services, The Office of the National Coordinator for Health Information Technology, *Connecting Health and Care for the Nation: A Ten Year Vision to Achieve Interoperable Health IT Infrastructure*, June 2014.
[2] Tripathi M, Delano D, Lund B, Rudolph L. Engaging patients for health information exchange. *Health Aff (Millwood)*. 2009;28(2):435-443.

What has Connecticut done to build Health IT infrastructure?

Connecticut has initiated Health IT efforts several times. In 2007, via Public Act 07-2, "*An Act Implementing the Provisions of the Budget Concerning Human Services and Public Health*" the first Connecticut State Health Information Technology Plan was developed by the Department of Public Health. In 2012, the Health Technology Workgroup of the Connecticut Health Care Cabinet[3] recommended the following:

1. adopt industry standards for information exchange;
2. promote reusable components through standard interfaces and modularity;
3. promote efficient and effective data sharing to meet stakeholder needs;
4. provide a person-centric focus;
5. promote interoperability, integration and an open architecture;
6. promote secure information exchange; and
7. promote good practices (e.g., the Capability Mature Model and data warehouse).

Purpose

This report, *CT HealthIT Strategic and Operational Plan for Governance*, is the culmination of the multi-agency workgroup effort to articulate the state's vision and a governance framework to implement statewide HealthIT projects.

Subsequently, the Connecticut General Assembly created the quasi-public Health Information Technology Exchange of Connecticut (HITE-CT) in 2010[4], sunset the agency effective June 30, 2014[5], and transferred responsibility for implementing a statewide Health IT plan and establishing standards to facilitate development of HIE to the Commissioner of the Department of Social Services (DSS), effective July 1, 2014. The Commissioner, in accordance with this legislative mandate, convened a multi-agency workgroup to build upon the state's 2013 Health IT Strategic and Operational Plan,[6] develop a shared Health IT vision for the state, identify common Health IT goals, and develop a Health IT governance framework that builds upon and ties together various health and human services initiatives. This report presents the work of the multi-agency workgroup that met monthly between October 2014 and March 2015.

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[3] *Integrating Connecticut's Health Information Technology: A White Paper prepared by the Health Technology Workgroup of the Connecticut Health Care Cabinet*, August 29,2012.

[4] CGS §19a-750(c)(1) Sec. 82-90, 96 *An Act Concerning Revisions to Public Health Related Statutes and the Establishment of the Health Information Technology Exchange of Connecticut*, 2010

[5] Public Act 14-217 revised Connecticut General Statutes Sec. 173, Section 4-60i

[6] Department of Public Health, Update to Strategic and Operational Plan for Statewide HIE in Connecticut, February 28, 2013.

Background - Connecticut's Health IT Landscape

The Health Information Technology for Economic and Clinical Health Act (HITECH) provides federal funding through the Centers for Medicare and Medicaid Services (CMS) for state-based Health IT initiatives. The goal of HITECH is to increase the use of Health IT to improve quality, safety and efficiency of health care while reducing disparities, engaging patients and families, improving care coordination, ensuring adequate privacy and security protections for personal health information and improving population and public health. As of June 2015, the State of Connecticut had received a little over $325 million through the CMS's Electronic Health Record incentive program.

Almost 6,170 eligible professionals and all hospitals in Connecticut have received payments for adoption of certified electronic health records (EHRs) and many have attested to achieving Meaningful Use Stage 1. A survey to assess physicians EHR adoption rates was completed in 2011 and 2013. Based on the 1,346 responses, about 68-74% of physicians are either using EHRs or are in the process of implementing EHRs -- an increase from 53-56% of physicians in 2011.[7] Based on the current trends, by end of 2015, EHR adoption among physicians will exceed 75%. E-prescribing activities increased from 2011 to 2013 among pharmacies and prescribers. Ninety-six percent (96%) of pharmacies were enabled for processing e-prescriptions and 62% of prescribers were e-prescribing.[8] In 2013, 63% of Connecticut's hospitals were sharing lab results electronically, higher than the national average of 56%.[9] 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.

Consumer Perspective

Based on a Connecticut resident survey completed in 2013, 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

Current Health IT Assets

- Standards-based Provider Directory
- Enterprise Master Patient Index
- Health Information Service Provider for Direct Messaging
- Integrated Eligibility System
- Indexing capability
- Personal Health Records
- High EHR adoption

[7] Tikoo M, Costello D. Evaluating Connecticut's Health Information Technology Exchange: Physician Survey Report. Farmington, CT:
University of Connecticut Health Center; 2014
[8] Ibid.
[9] Tikoo M, Roy A. Evaluating Connecticut's Health Information Technology Exchange: Laboratory Survey Report. Farmington, CT: University of Connecticut Health Center; 2014.

said to them during their last visit. [10] When asked about their views on the use of health information technologies in improving care, 83% of participants had heard about electronic medical records, 72% supported a national HIE that was driven by patient consent, and 64% expressed support for an "opt-in" while 21% supported "opt-out" consent model.

Health IT Assets and On-going Initiatives

Since assuming responsibility for Health IT, including HIE on July 1, 2014, DSS has made steady progress on developing a pathway for Health IT and HIE in Connecticut. A number of technology solutions, such as the Enterprise Master Person index (EMPI), Provider Directory (PD), and Health Information Services Providers (HISP) have been procured by the state, and are being deployed at the state's Bureau of Enterprise Systems and Technology (BEST). These assets are fundamental to building a robust Health IT infrastructure, which is essential for enhanced care delivery, payment reform, and implementing and operating a statewide HIE.

Integrated Eligibility System

DSS is also working toward the deployment of a new integrated eligibility system for Medicaid. This new eligibility management system will replace an antiquated legacy system.

Enterprise Master Patient Index and Provider Directory

DSS, along with Department of Administrative Services/BEST, is in the process of implementing an Enterprise Master Patient Index and Provider Directory[11] for initial use with ImpaCT. Both of these assets were previously procured by HITE-CT and are available for enterprise use. Discussions will be initiated with organizations interested in uni- or bi-directional exchange of provider directory feeds with a cost-share associated for bi-directional feeds.

Medicaid Electronic Health Records Incentive Program

DSS launched the Medicaid EHR Incentive Program in July 2011, and the first incentive payments to eligible providers were issued in September 2011. As of June 2015, 2,029 eligible professionals (EPs) and 28 eligible hospitals (EHs) have been paid under the Medicaid EHR Incentive Program, of which 601 EPs and 26 EHs have been approved for Meaningful Use Stage 1. This incentive program also supports the collection of electronic clinical quality measures and the infrastructure for Direct Secure Messaging.

Direct Secure Messaging (DSM)

DSS is promoting the use of Direct Secure Messaging (DSM) 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 secure exchange of documents (e.g., discharge

[10] Tikoo M, Costello D. Evaluating Connecticut's Health Information Technology Exchange: Consumer Survey Report. Farmington, CT: University of Connecticut Health Center; 2014.
[11] The contracted vendor for both EMPI and Provider Directory is NextGate.

summary, assessments, orders and continuity of care documents). DSM is a simple, secure, scalable, and a standards-based way for participants to send authenticated, encrypted health information directly to known, trusted recipients over the internet. DSM is HIPAA compliant, and does not require the use of an EHR. In April 2014, DSS established a Health Information Service Provider (HISP) to provision Direct mailboxes for eligible providers (EPs) participating in the Medicaid EHR Incentive Program. A one-year free subscription is being provided, renewable at cost after the first year. Use of DSM will help eligible providers exchange transfer of care summaries with long-term care facilities that may not have access to certified EHRs and provides a simple and secure method for exchange of health information.

Electronic Clinical Quality Measures (eCQMs)

DSS is working with healthcare providers to explore ways of using defined standards, such as Quality Reporting Document Architecture (QRDAs) Category I and III, to report and measure clinical quality; ensuring timely access to data for reporting and audits while minimizing data retrieval and storage. DSS has purchased data indexing technology[12] to collect Meaningful Use measures (Stage 1 and Stage 2) as they relate to the Medicaid EHR incentive program[13]. This technology uses indices and edge servers to access data, eliminating the need for creating, exporting and importing data files.

Personal Health Records (PHRs)

DSS is the recipient of a four-year grant from CMS, Testing Experience and Functional Assessment Tools (TEFT), which will provide PHRs to Medicaid beneficiaries. This four-year initiative is comprised of four components, of which two are related to Health IT (1) testing the use of PHRs among the community-based long-term services and supports (LTSS) and (2) aiding the development and testing of the eLTSS content and transport standard.

CT State Innovation Model (SIM)

Connecticut received a four-year grant from CMS to implement the State Innovation Model (SIM). DSS is leading the planning and implementation of associated Health IT components. The goal of this effort is to test a model for a person-centered healthcare system that is effective, efficient, and results in improved population health and eliminates health inequities.[14]

CT Health IT Website

DSS has launched a website -- www.ct.gov/cthealthit -- to provide transparency and progress updates on Health IT initiatives.

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[12] Annual licensing agreement; contracted vendor is Zato Health (www.zatohealth.com)
[13] CMS Meaningful Use Measures available at: http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/Meaningful_Use.html
[14] Connecticut SIM Model Test Proposal available at: http://www.healthreform.ct.gov/ohri/cwp/view.asp?a=2741&q=334890

Connecticut's Health Foci[15]

In 2014, the Connecticut Department of Public Health undertook a comprehensive State Health assessment which was the foundation for the development of the 2014 Connecticut State Health Improvement Plan. Functional and operational systems that support the CT Health IT framework will be instrumental in Connecticut, achieving *Healthy Connecticut 2020* goals.

Maternal, Infant, and Child Health

- The prevalence of preterm birth and low birthweight is highest in Connecticut's largest towns. Preterm birth, low birthweight, and fetal and infant mortality remain highest among infants born to black non-Hispanic women relative to white non-Hispanics.
- Over the past decade, neonatal abstinence syndrome[16] has increased and is most prevalent among white non-Hispanics and persons with Medicaid insurance coverage.

Chronic Diseases and Their Risk Factors

In Connecticut, chronic conditions such as heart disease, cancer, stroke, and chronic lower respiratory disease are the leading causes of death.

- Some diseases and risk factors, such as asthma, diabetes, high blood pressure, and high cholesterol, are more prevalent among persons with lower educational attainment or lower incomes.
- There is higher mortality among black non-Hispanics relative to other racial and ethnic groups for cancer, heart disease, and stroke.
- The prevalence of obesity has increased in the past decade, and is most common among adult and adolescent males and persons with lower educational attainment.

Healthy Connecticut 2020: State Health Improvement Plan foci:

- Maternal, Infant, and Child Health
- Environmental Risk Factors and Health
- Chronic Disease Prevention and Control
- Infectious Disease Prevention and Control
- Injury and Violence Prevention
- Mental Health, Alcohol, and Substance Abuse
- Health Systems

[15] Connecticut Department of Public Health. 2014. *Healthy Connecticut 2020. 1: State Health Assessment*. Hartford, CT: Connecticut Department of Public Health.

[16] Neonatal abstinence syndrome, a condition in which babies are born addicted to prescription pain relievers.

Infectious Diseases

- Connecticut ranks among the top 10 states for vaccination coverage of young children.
- One in five children 19-35 months of age still have not completed the full series of vaccines recommended by the CDC.
- Some vaccine preventable diseases, such as pertussis, still occur even with high vaccination rates.
- Connecticut has experienced significant improvements in the treatment, survival, and quality of life of persons with HIV, as evidenced by a decline in the number of new HIV cases and deaths among persons with HIV. Males and black non-Hispanics are more likely than others to be diagnosed with HIV.

Mental Health, Alcohol, and Substance Abuse

Connecticut has experienced an increase in emergency department visits for alcohol use or dependence. Further, deaths due to overdose of prescription pain killers have been increasing and are more common in suburbs and in rural regions of the state.

Injuries and Violence

Unintentional injuries are a major contributor to premature death in Connecticut. Falls, accidental poisoning, and motor vehicle accidents are the top three causes of deaths due to unintentional injuries. During the past decade, the number of deaths due to falls doubled. Intentional injuries also contribute to premature mortality. The number of deaths due to suicide has increased in Connecticut over the past decade, and suicide is the leading cause of injury death.

Environmental Risk Factors and Health

Connecticut experienced a decline in childhood lead poisoning during the past decade. Lead poisoning remains most common in Connecticut's largest towns and areas with older housing units. Opportunities exist to improve environmental conditions in homes and communities, to address indoor hazards and incorporate health considerations into land planning and use.

Health Systems

Racial, ethnic, and geographic disparities exist in health insurance coverage and health care access and utilization. Health insurance coverage is lower in Connecticut's largest towns and for Hispanics. Hispanics are also less likely than other racial or ethnic groups to have a usual source of care. Preventable emergency department visits, health professional shortage areas, and medically underserved communities are more common in and around Connecticut's largest towns.

Work Accomplished via Public Act 14-217

Purpose

This report, *CT HealthIT Strategic and Operational Plan for Governance*, is the culmination of a multi-agency workgroup effort to articulate the state's vision and a governance framework to implement statewide Health IT projects. The vision of this multi-agency collaborative effort is focused on the development of a modern, horizontally-integrated system that,

> *"empowers individuals and health resource providers by ensuring access to information necessary to achieve better health outcomes."*

With the approval from the Secretary of the Office of Policy and Management, this report will;

1. Serve as a launching point for engagement of the State Health Information Technology Advisory Council[17] to develop priorities and policy recommendations for advancing the state's Health IT and HIE efforts and goals, and
2. Guide the future design, development and implementation of Health IT initiatives that promote the adoption and use of national standards that support secure information exchanges and enhance interoperability across health and human services.

CT HealthIT – Planning Process

The workgroup was comprised of health and human services delivery agencies including: Departments of Public Health, Developmental Services, Social Services, Mental Health and Addiction Services, Children and Families, Veterans' Affairs, Consumer Protection, Correction, and Access Health CT. [See Appendix A - Workgroup Members]. Connecticut made a conscious choice to use the *Illinois Framework*[18] to operationalize the six attributes of successful governance, and structured workgroup meetings to deliberate on the merits of the framework for use in Connecticut.

The workgroup convened six planning meetings between October 2014 and March 2015 to generate ideas for a shared vision statement and governance structure. The planning meetings were chaired by the DSS Commissioner and the State CIO, facilitated by CSG Government Solutions and staffed by the State Health IT Coordinator. Workgroup participants included Executive Sponsors (commissioners and agency heads) and Supporting Agency Leadership. The meetings were structured to build consensus around a Health IT vision statement by using CSG's AIM (articulate, investigate, and migrate) Methodology. [See Appendix B – Methodology]

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[17] Public Act 15-146, p 47-62.

[18] *A Handbook for States - Establishing Governance for Health and Human Services Interoperability Initiatives: A Report of the State of Illinois Interoperability and Integration Project*. (2013). The Illinois Framework.

The workgroup's Executive Sponsors and Supporting Leadership engaged in facilitated brainstorming session to generate ideas for a shared vision statement. The vision and mission statements are designed to communicate the goals and objectives that build the framework for continuous service to the citizens of Connecticut.

Results of the planning process

Over the course of six meetings, the workgroup leadership articulated a vision, mission, Health IT framework to explicitly connect Health IT and a person-centered care delivery system. Figure 1 graphically represents the consensus and the next steps that the work group members agreed to accomplish in the meetings.

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.

Health IT Framework

CT HealthIT framework [See Figure2] built upon the 2012 recommendations of the Health Technology Workgroup of the Connecticut Health Care Cabinet[19] and the 2013 Health IT Strategic and Operational Plan.[20]

The CT Health IT Framework is driven by a *person-centric* focus and follows the premise that Health IT needs to support the *health care systems, information*, and *business* needs. The ultimate goal is *better health outcomes* for people. The health care delivery system is built with the aim of improving *access* to services, *educating* and informing people, better *services* and *supports*, and a *transparent* system of care. Lastly, the Health IT infrastructure that supports this conceptual framework needs to *align with state and federal standards*, *support change and collaboration*, while *maximizing return on investments*.

[19] *Integrating Connecticut's Health Information Technology: A White Paper prepared by the Health Technology Workgroup of the Connecticut Health Care Cabinet*, August 29,2012.
[20] Department of Public Health, Update to Strategic and Operational Plan for Statewide HIE in Connecticut, February 28, 2013.

Figure 1: Setting the Stage - Developing Connecticut's HealthIT Governance Framework

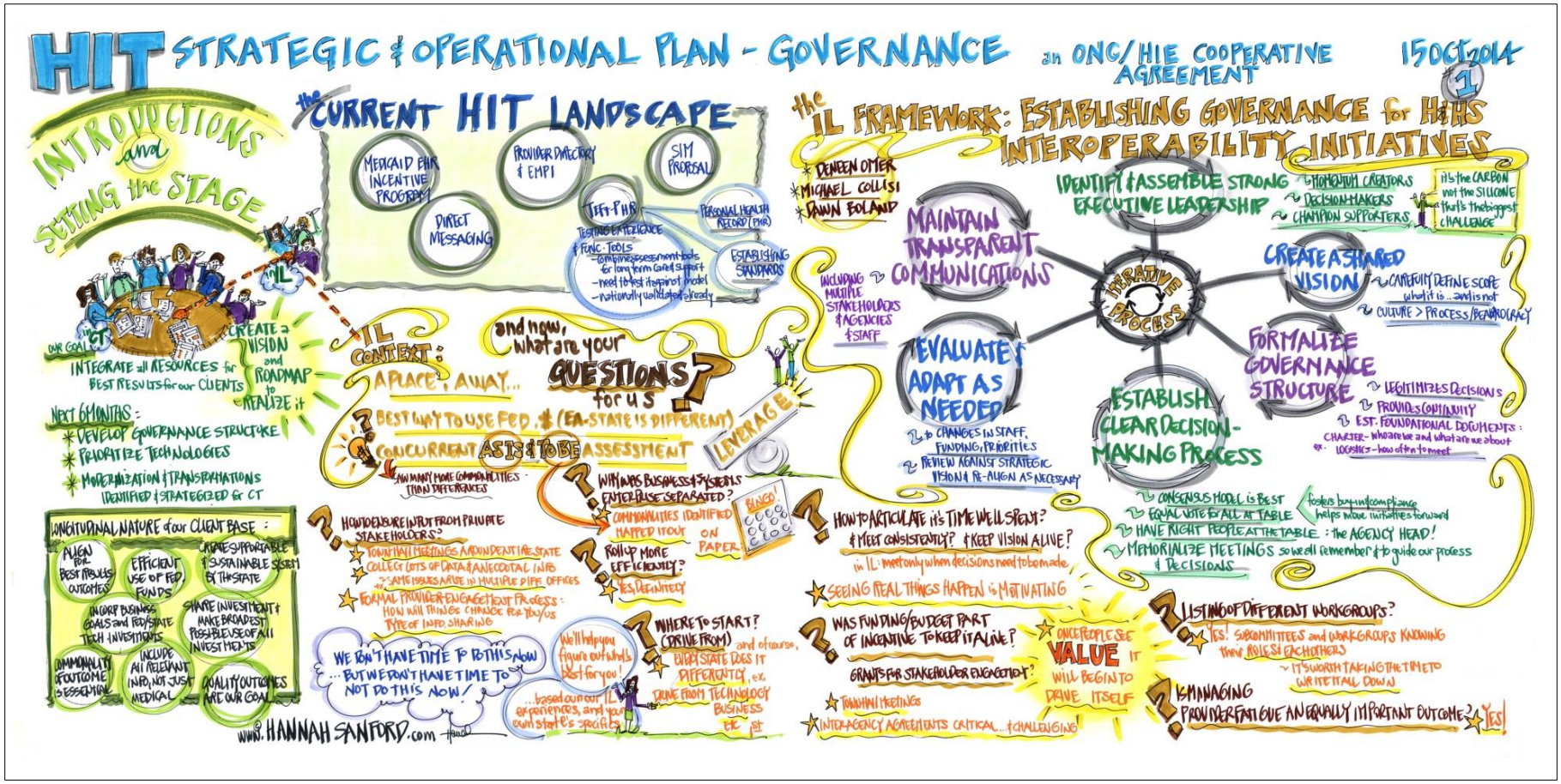
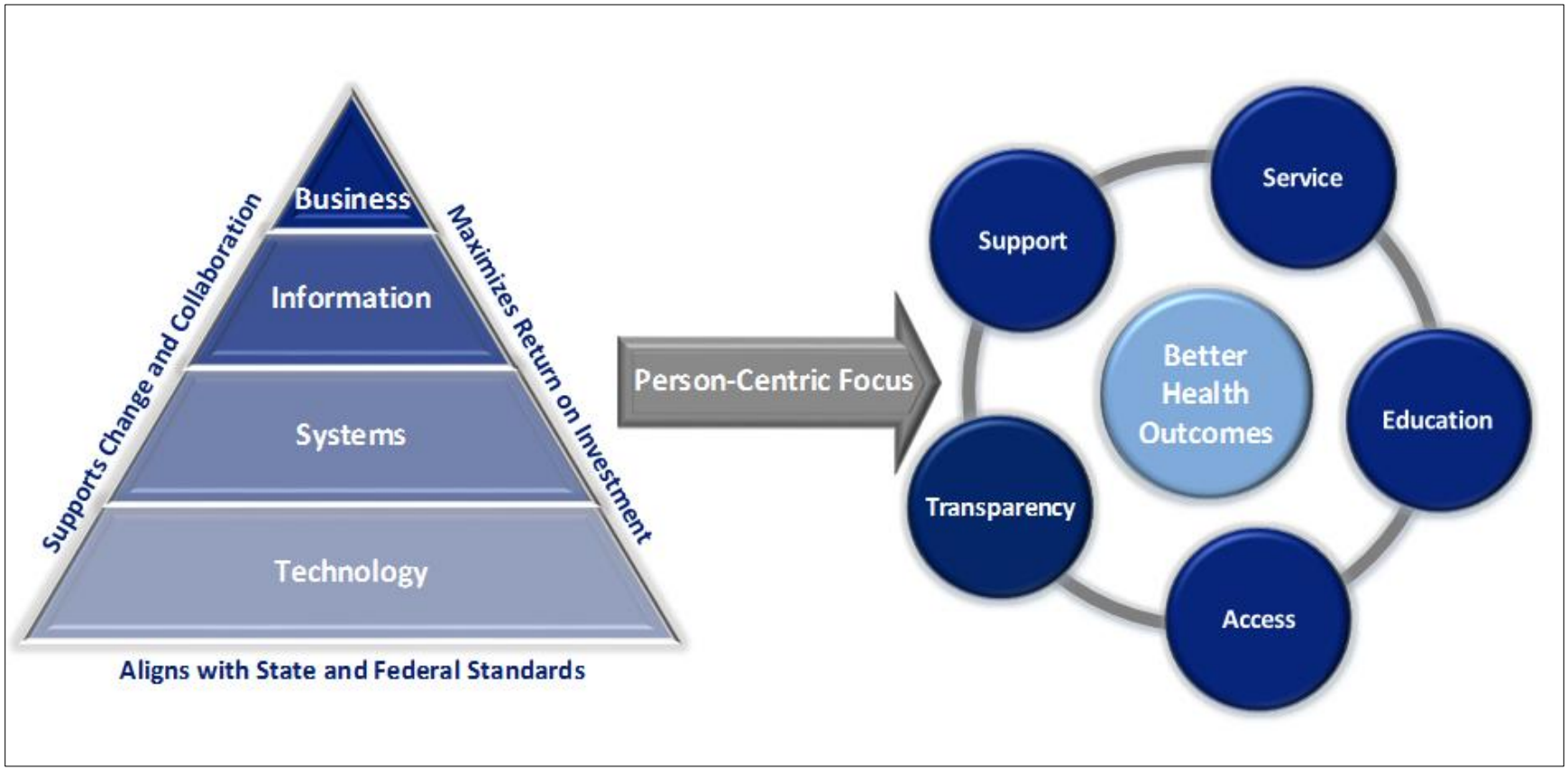


Figure 2: Connecticut's HealthIT Framework



CT HealthIT Governance

The CT HealthIT governance structure provides for interoperability across health and human services agencies. These agencies have traditionally operated independently and made health information technology decisions autonomously. Interoperability within and across agencies will support the exchange and use of information to coordinate services and inform decision making.

Governance Principles

- Person-centric focus across the health and human services enterprise
- Optimal use of standards, including interoperability standards
- Increased public/private sector collaboration in the delivery of health and human services

Governance models are typically comprised of multiple layers, including a decision-making body, subcommittees and a staffed project management office. Whether governance begins with a top-down approach with the jurisdiction's senior-most leadership, or as a movement among like-minded agency leaders, effective leaders are required throughout a governance structure to create buy-in, build momentum and move important work forward. Strong executive leadership requires the vision and capacity to lead across domains.

The workgroup developed a governance structure based on of three principles**:**

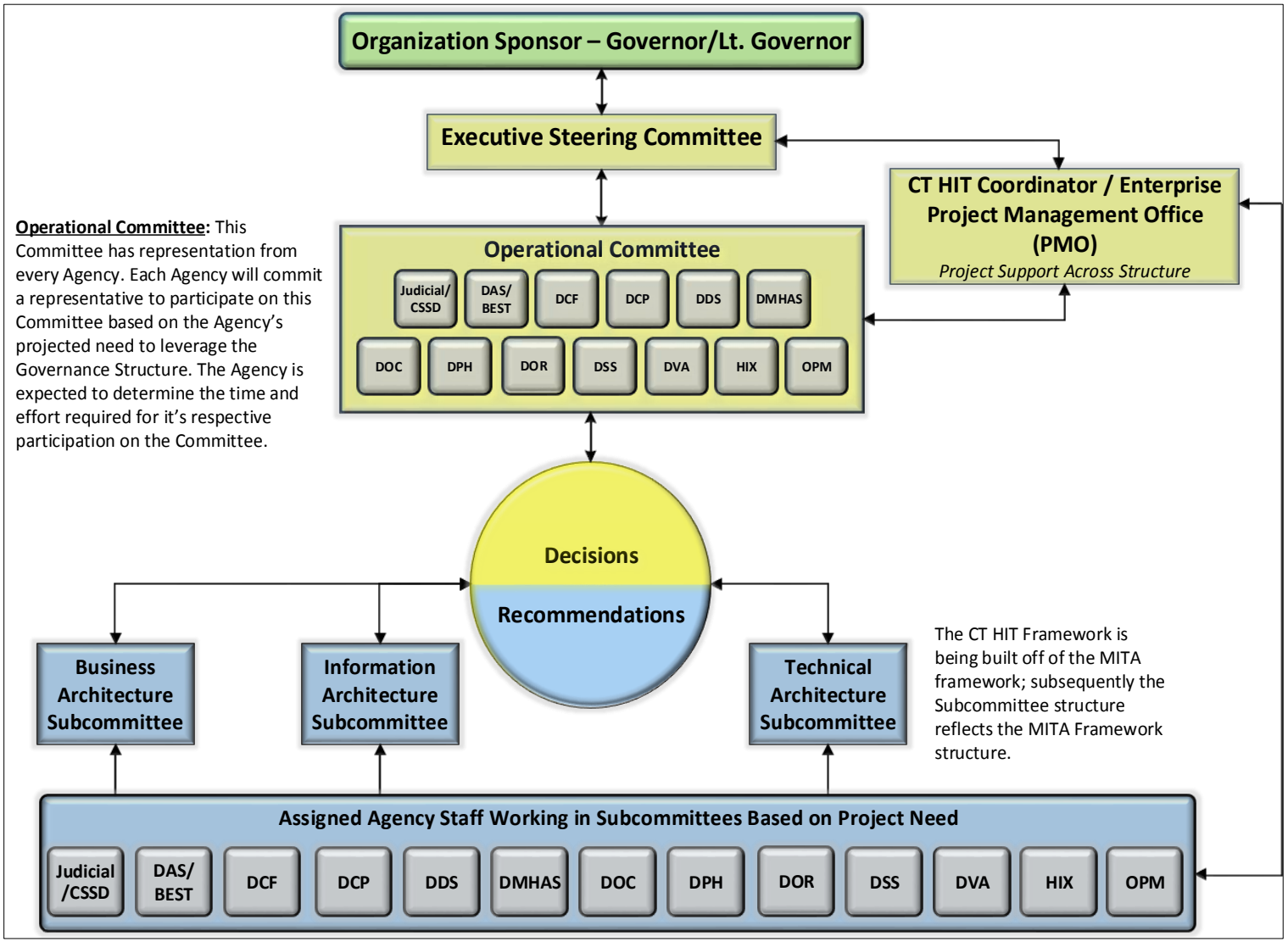
1. Person-centric focus across the health and human services enterprise
2. Optimal use of standards, including interoperability standards, to leverage state resources to ensure coordination across health and human services-funded programs to maximize return on investment.
3. Increased public/private sector collaboration in the delivery of health and human services

The CT HealthIT governance structure includes an Executive Steering Committee, Operational Committee, and three sub-committees: Business Architecture, Information Architecture and Technical Architecture. Charters were developed to identify the goals, purpose, guiding principles, membership, decision making process, roles and responsibilities, procedures, and cross-committee interaction for each CT HealthIT committee and sub-committee. [See Appendix C - Roles and Responsibilities]

The CT HealthIT governance structure provides for:

1. Systematic decision-making in which roles and responsibilities are clear
2. Integrated planning, development, oversight and fiscal management
3. Setting project priorities and vision, defining strategies and outcomes
4. Maximizing the use of resources, eliminating redundancies and streamlining processes
5. Resolving conflicts, performance monitoring, and conferring legitimacy on decisions.

Figure 3: Connecticut's HealthIT Governance Structure



CT HealthIT Goals and Objectives

The CT HealthIT governance framework will be operationalized to develop criteria for defining Health IT projects, and to set priorities, timelines and funding requirements for 2015-2017. The workgroup deemed endorsement of the Health IT governance structure through interagency agreements mission critical; a vital first step towards implementing a shared vision. [See Appendix D – Interagency Agreement]. The workgroup prioritized three goals with associated objectives and action steps for consideration, prioritization and planning.

Goal 1: 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 is person-centered, timely, safe, efficient, effective, and equitable	1. Develop detailed project plan 2. Produce rapid cycle evaluation to support continuous learning & improvement 3. Develop and implement on-line application / enrollment

Goal 2: Enable individuals to manage their health by providing access to Personal Health Information 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	1. Promote data sharing among CT HHS agencies 2. Develop guidelines for technology development that promote improved citizen access to and management of their PHI

Goal 3: 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 HealthIT Framework	1. Establish an enterprise PMO 2. Facilitate patient provider communication 3. Support informative/reporting need

Operational Priorities, Funding Considerations, and Sustainability

Operational Priorities - 2015

1. Execute interagency agreements[21]
2. Convene Health IT Advisory Council[22]
3. Convene Executive Steering & Other Committees
4. Deploy Enterprise Project Management Office
5. Develop criteria for CT HealthIT governance projects
6. Determine 2015-2017 priorities, goals, objectives, and timelines
7. Evaluate Office of Policy and Management IT Investment Scorecard for CT HealthIT use
8. Develop budget/funding requirements
9. Finalize SOP by 12/31/15

Funding/Budget/Sustainability

A budget and budget narrative, including funding sources, will be prepared for 2015-2017 following the operationalization of the CT HealthIT governance framework and subsequent development of Health IT priorities, goals, objectives and timeline.

While Public Acts 14-217 and 15-146 established Health IT/HIE authority, they did not appropriate sufficient state funds to support these initiatives. The Connecticut General Assembly appropriated $292,097 for SFY 2016 and $358,544 for SFY2017 for PA 15-146, sections 20-26. CT HealthIT recommends the state commit to set aside funds on an on-going basis so that Connecticut can leverage 90% federal matching provision available from CMS via the HITECH Act until 2021. The federal funds are available to fund staff and other operational expenses as they relate to on-boarding eligible Medicaid providers to the HIE or for sharing costs associated with building initial Health IT infrastructure.

Additionally, new Health IT investment processes should take into account the existing strategic investment fund, enacted in 2012 to create appropriate oversight of technology investments made by the State of Connecticut. The IT Investment fund has the following goals and priorities:

1. Make state government more user-friendly and efficient for citizens, businesses and municipalities when transacting business with the state, including areas related to obtaining permits licenses, paying taxes or accessing services;
2. Make information about services and state government more available and easy to find on-line;

[21] Connecticut Framework-Inter Agency Agreement, March 18,2015
[22] Pursuant to Public Act 15-146.

3. Implement efficient, modern business practices that result in clear and identifiable cost savings and service delivery improvements for state agencies;
4. Increase transparency for the public and policy makers regarding costs, effectiveness and service outcomes within and across state agencies;
5. Reduce the costs to the state regarding its implementation, use and management of technology systems through shared services, applications and hardware across agency boundaries and by other means;
6. Implement systems needed in support of health care reform and managing costs and improving outcomes related to the state's health and human service programs; and
7. Ensure the appropriate confidentiality, integrity and availability of the State's valuable electronic or digital data information resources in order to provide an environment in which the state's user community can safely conduct state business.

Currently, the oversight of this fund is coordinated through an Information Technology Strategy and Investment Committee comprised of eight agency heads and the State of Connecticut CIO. The fund is managed within the Office of Policy and Management, which has established a cross-agency process for initiating capital requests for technology to ensure alignment for enterprise reuse and to assess return on investment. The application process includes preparation of an Investment Brief[23] and completion of forms which are then evaluated using the IT Investment Scorecard [See table – IT Investment Scorecard].

CT HealthIT workgroup leadership recommends this process be enhanced or modified where appropriate for reuse and evaluation of Health IT investments being proposed by the Enterprise Project Management Office (EPMO), as proposed in this report. Additionally, each Health IT project upon approval, should asses a percent of the approved cost toward EPMO operation. The EPMO would ensure an effective and efficient project management based on best-practices associated with managing enterprise-level Health IT projects.

[23] OPM FY-15 Investment Brief available at: Investment Brief

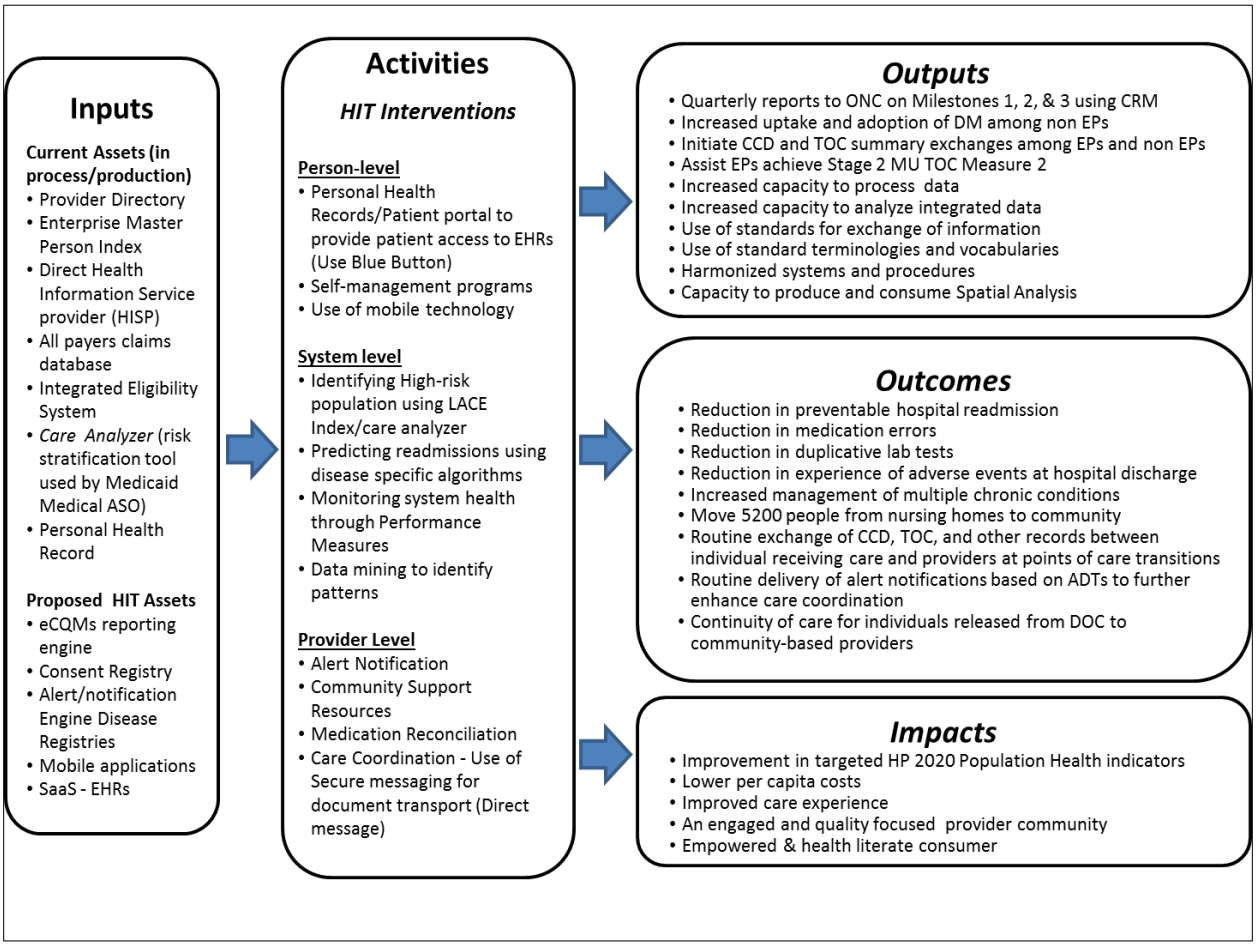
Table 1: IT Investment Scorecard

	IT Investment Analysis & Ranking		Rating	Weight
1	**Aligns with the investment fund's 7 goals and priorities* with an emphasis on projects involving shared approaches or solutions.**			25%
	Minor (Little to no alignment with priorities)	1		
	Moderate (Alignment to 2-4 priorities)	5		
	Major (Alignment to 5 or more priorities)	10		
2	**Will have positive impact on services to citizens, businesses and municipalities and on operating budgets. Projects with the highest savings/benefits to cost ratios will be given priority.**			15%
	Minor (Little to no positive impact to services and operating budget)	1		
	Moderate (Impact to services and/or impact on reducing operating budget)	5		
	Major (Impact to both services and operating budget)	10		
3	**Propose strong project management systems that will ensure its successful implementation.**			15%
	Minimal (Minimal executive sponsorship and/or proven track record of successful project completions)	1		
	Moderate (Moderate executive sponsorship and/or proven track record of successful project completions)	5		
	Major (Strong executive sponsorship and a proven track record of successful project implementations)	10		
4	**Leverage other funding sources**			10%
	0 - 30%	1		
	31% - 60%	5		
	> 60%	10		
5	**Return on Investment (Annual Operating Savings / Annualized Capital Costs)**			20%
	< 1%	1		
	2% - 50%	5		
	> 50%	10		
6	**Reduction/consolidation of applications and/or infrastructure**			10%
	Little reduction and/or consolidation of applications and infrastructure	1		
	Moderate reduction and/or consolidation of applications and infrastructure	5		
	Significant reduction and/or consolidation of applications and infrastructure	10		
7	**Needed for compliance with federal or other regulatory mandates?**			5%
	No, not required for compliance with federal or other regulatory mandates	0		
	Yes, required for compliance with federal or other regulatory mandates	5		
	Total		**0**	**100%**

Next Steps

The State Health IT Advisory Council[24] will build upon the workgroup's priorities to operationalize the CT HealthIT governance structure, goals and objectives established during the six planning meetings for 2015-2017. The CT HealthIT logic model depicts planned inputs, activities, outputs and health outcomes associated with investments in Health IT. CT HealthIT is positioned to support initiatives that leverage technology solutions to improve health outcomes in seven focus areas identified in the *Healthy Connecticut 2020 State Health Assessment* as needing immediate attention.[25]

CT HealthIT Logic Model



[24] Pursuant to Public Act 15-146.

[25] Connecticut Department of Public Health. 2014. *Healthy Connecticut 2020. 1: State Health Assessment*. Hartford, CT: Connecticut Department of Public Health.

Establishing the State Health IT Advisory Committee

Subsequent to the completion of the multi-agency Health IT workgroup's planning meetings and adoption of the CT HealthIT vision, mission and governance structure, the 2015 Connecticut General Assembly passed Senate Bill No. 811. This bill is effective July 1, 2015 and establishes a 28 member Health IT Advisory Council to advise the Commissioner of Social Services in developing priorities and policy recommendations for advancing the state's Health IT and HIE efforts and goals, and to advise in the development and implementation of the statewide Health IT Plan, standards, and state-wide HIE. This Council will also advise the Commissioner regarding development of governance, oversight and accountability measures to ensure success in achieving the state's Health IT and HIE goals [See Appendix D – Public Act 15-146]. The CT HealthIT Strategic and Operational Plan, including the governance structure, will be refreshed by January 1, 2016 to reflect this newly-formed advisory body and its work product.

Policy

CT HealthIT is substantively supported through Public Act 15-146.

Staffing/Capacity

A staffing and capacity plan will be prepared for 2015-2017 following the operationalization of the CT HealthIT governance structure and subsequent development of Health IT priorities, goals, objectives and timeline.

Risks / Risk Mitigation

There are a number of risks associated with successful implementation of the CT HealthIT governance structure, vision and mission. By reviewing the lessons learned[26] and by identifying operational risks in advance, the Health IT Advisory Council, with strong and focused leadership and guidance from its Chairs, can develop safeguards and preemptive recommendations to mitigate these risks.

1. Appropriations: CT HealthIT requires funding for sustainability. In the past five years the state has directed no funding for Health IT investments; all Health IT initiatives undertaken have relied on federal funding.
2. Achieving Consensus: CT HealthIT Advisory Council will need to build consensus across twenty-eight members.
3. Collective Action: Agencies will need to overcome historical tendency toward individualized decision making and unilateral action, for the CT HealthIT governance structure to be viable.
4. SMART Action: Ability to execute specific, measureable, achievable, realistic and time-bound plans.
5. Conflicts of Interest: Need to be identified early in the process.
6. Attendance: Requires commitment and sustained effort of the CT HealthIT Advisory Council, Governance Committees and subcommittees.

[26] Tikoo M, Hilario H. *Evaluating Connecticut's Health Information Technology Exchange: Stakeholder Report.* Farmington, CT: University of Connecticut Health Center; 2014.

Appendices

Appendix A – CT HealthIT Workgroup Members

EXECUTIVE SPONSORS		
Roderick Bremby (Co-Chair) Commissioner Department of Social Services	**Mark Raymond (Co-Chair)** Chief Information Officer State of Connecticut	Benjamin Barnes Secretary Office of Policy and Management
Michelle Seagull for Jonathan Harris, Commissioner Department of Consumer Protection	Fernando Muniz for Joette Katz, Commissioner Department of Children and Families	Janet Brancifort for Jewel Mullen, Commissioner Department of Public Health
Tim Deschenes-Desmond for Morna Murray, Commissioner Department of Developmental Services	Babatunde O. Green for Sean M. Connolly, Commissioner Department of Veterans Affairs	Michael Michaud for Patricia Rehmer, Commissioner Department of Mental Health and Addiction Services
Cheryl Cepelek for Scott Semple, Commissioner Department of Corrections	James Wadleigh Chief Executive Officer Access Health CT	John Vittner Director, IT Policy Office of Policy and Management
SUPPORTING LEADERSHIP		
Minakshi Tikoo State Health IT Coordinator Department of Social Services	Mark Heuschkel Department of Social Services	Kate McEvoy Department of Social Services
Kasia Janik Office of Policy and Management	Louis Polzella Department of Social Services	Vance Dean Department of Social Services
Mark Schaefer Office of the Healthcare Advocate	Peter VanLoon, Executive Director James Michel Access Health CT	Tina Good Department of Developmental Services

Appendix B – Methodology

The CT HIT Leadership Team leveraged the CSG AIM Methodology to articulate, investigate, migrate and build consensus around the HIT Vision Statement for Connecticut. This methodology, designed to illicit brainstorming and to build team consensus, adheres to the following process steps:

- **Articulate**: Leverage rapid analysis to document the details of each category
- **Investigate**: Brainstorm to build upon the ideas of each category
- **Migrate**: Develop objective statements through consensus building

This approach was applied to gather relative data points based on the following three overarching CT HIT principles:

- **Person-centric focus**: Establish person-centric focus across HHS enterprise
- **Optimize use of standards to maximize ROI of state resources**: Leverage and maximize state resources to ensure coordination across HHS funded programs. This includes standards and interoperability across state agencies.
- **Public/private sector collaboration**: Increase the participation of public and private sectors in the delivery of human services.

The final deliverable is a Shared Vision Statement that incorporates the thoughts and feedback from the team based on the developed objective statements, team voting, and consensus. The Shared Vision Statement has the following attributes:

- Measurable, far-reaching, aspirational and at the same time achievable
- Clearly defined scope with goals and objectives
- Cross-agency collaboration and cooperation
- Recognizes the need for a client-centered approach

Workshop Results

The following tables incorporate the results of each of the steps in the AIM Methodology displaying the input, thoughts, ideas, and recommendations of the team. The information contained is verbatim from the team; duplications are intentional as they reflect perspectives from different participants in the exercise. The numbers in parenthesis "( )" in the Migrate section of the table indicate the number of votes that each objective statement received during the voting process.

Table 1: Person-Centric Focus – Results of the AIM exercise pertaining to the principles for citizens across the HHS Enterprise

HIT Enterprise		
Person-Centric Focus		
Articulate: ➢ Ease of system use for all ages ➢ Individual access to their info ➢ Access ➢ Informative ➢ Simplicity ➢ Customer support ➢ EMPI ➢ Improved health outcomes ➢ Outcome focus ➢ People's preferences ➢ Privacy and security ➢ Standard ➢ Integration of data	➢ Education ➢ Digital divide ➢ Longitudinal info ➢ Translate languages ➢ User interface (iWatch) ➢ Stakeholder influence ➢ Clinical information exchange (HIE) ➢ Reduce errors ➢ Continuity of care ➢ Collaboration ➢ Provider directory ➢ Informed consent registry	➢ Clinical coordination ➢ 360 degree view of person ➢ Client enabling/empowering ➢ Operational as well as analytical focus ➢ Cross state agency data sharing ➢ Data ➢ Relational to other data sources ➢ Transparent ➢ Full quality ➢ Cost transparent
Investigate: ➢ Easily accessible by all users with appropriate privacy and security ➢ Outcome focused ➢ Holistic data view (across person and programs) ➢ Tools that empower the self-management of health (citizen-ownership of health data) ➢ Better health for CT citizens ➢ Portability of PHR ➢ Timely, equitable, access to Health Care ➢ Responsive to social determinants/reduce stigma ➢ Customer services support and education ➢ Preventing wasted processes and expense by the Providers and patients		
Migrate: ➢ Provide customer service, support and education (1) ➢ Facilitate better health outcomes for CT citizens (7) ➢ Create an easily accessible data system for all users with appropriate privacy and security (4) ➢ Empower citizens to manage own health (1) ➢ Reduce waste (money, time, scarce resources) for stakeholders through greater access and transparency (1)		

Table 2: Standards to Maximize ROI – Results of the AIM exercise pertaining to the principles for optimizing the use of standards to minimize the ROI across the HHS Enterprise

HIT Enterprise		
Standards to Maximize ROI		
Articulate: ➢ Measure ROI KPI ➢ Performance ➢ Cloud/App ➢ Web-enabled ➢ Mobile ➢ Analytics/non-proprietary technology ➢ Focus on enabling interoperability	➢ Sharing tools and tech info ➢ Enterprise ➢ Common Data Dictionary ➢ Standards Enabling Interoperability ➢ Stakeholder engagement ➢ Education simplicity ➢ Leverage existing TEFT/investments	➢ Principles vs mandates ➢ Allow maximized funding/ $ per people ➢ Sustainability incremental ➢ Incentives to develop ➢ Tie to national standards ➢ Access ➢ Supported by statute, regulations, and policy
Investigate: ➢ Engage stakeholders with education, simplicity, and technology ➢ Alignment with Federal standards ➢ Leverage existing standards to articulate a comprehensive, sustainable, data dictionary that creates interoperability and is supported by statute, policy and regulation ➢ Standards to guide development of technology in a manner that incentivizes and does not inhibits development ➢ Develop a framework based on shared values that is common across state agencies and maximizes ROI ➢ Leverage existing technology systems ➢ Develop and implement enterprise architecture framework		
Migrate: ➢ Develop a framework based on shared values that is common across state agencies and maximizes ROI. (14) ➢ Align and leverage state and federal standards to create a comprehensive, efficient, sustainable, interoperable HIT enterprise. ➢ Create a policy and regulatory environment that supports change and collaboration (1)		

Table 3: Public/Private Section Collaboration – Results of the AIM exercise pertaining to the principles for increasing the participation of public and private sectors in the delivery of human services

HIT Enterprise		
Public/Private Sector Collaboration		
Articulate: ➢ Equal ➢ Equal partnerships ➢ Trust ➢ Conflict Resolution ➢ What is in it for everybody ➢ Inclusive ➢ Effective communication ➢ Stakeholder access sustainability ➢ Reliable ➢ Integrated ➢ Continual	➢ Utility ➢ Comprehensive ➢ Standardized ➢ Consistency ➢ One size does not fit all priorities ➢ Shared success ➢ Share benefits ➢ Mutual self interest ➢ Sensitive to market reality ➢ Interoperability ➢ Universally enabling	➢ Accountability ➢ Seamless ➢ Clearly defined roles ➢ Support innovation ➢ RBA report cards ➢ Better information flow ➢ Provider access ➢ Honesty ➢ Private participate in planning ➢ Process responses ➢ Cost-effective
Investigate: ➢ Equal partnership and conflict resolution through inclusivity, honesty, trust, equality, and accountability ➢ Maximize knowledge across domains ➢ Create a system that supports public/private sector and is interoperable, flexible, does not supplant existing systems, universally enabling, and process responsive to evolving needs. ➢ Creating a sustainable model that recognizes conflicting goals/priorities among and between stakeholders ➢ Transparent relationship/process ➢ Common focus on customer/citizen		
Migrate: ➢ Create a sustainable model with a common focus on citizens as a means of managing conflicting goals/priorities among and between stakeholders. (6) ➢ Create a system that supports public/private partnership and is flexible, does not supplant existing systems to maximize knowledge across domains. (2)		

Objective Statements Transformed into the CT HIT Vision Statement

The objective statements resulting from the Migrate and Consensus building process are listed in priority order with the number of CT HIT Leadership votes aligned with the statement. This step identifies the priorities and positions the team to develop the Share Vision Statement.

Table 4: Objective Statement Ranking – Outlines, in priority order, the various Objective Statements as defined by the CT HIT Leadership team

Votes	Objective Statement
14	Develop a framework based on shared values that is common across state agencies and maximizes ROI.
7	Facilitate better health outcomes for CT citizens.
6	Create a sustainable model with a common focus on citizens as a means of managing conflicting goals/priorities among and between stakeholders.
4	Create an easily accessible data system for all users with appropriate privacy and security.
2	Create a system that supports public/private partnership and is flexible, does not supplant existing systems to maximize knowledge across domains.
1	Create a policy and regulatory environment that supports change and collaboration.
1	Provide customer service, support and education.
1	Empower citizens to manage own health.
1	Reduce waste (money, time, scarce resources) for stakeholders through greater access and transparency.
0	Align and leverage state and federal standards to create a comprehensive, efficient, sustainable, interoperable HIT enterprise.

Recommended Draft Vision Statement

The draft Vision Statement below was developed by the CSG team based on the Objective Statements that the CT HIT Leadership team has defined and prioritized. The intent is for the CT HIT Executive Leadership to review and modify to come to a consensus on a Shared Vision Statement that best exemplifies the go-forward direction of this team and the HIT program.

"Develop a Health Information Technology framework, based on shared values across state agencies. Maximize return on investment and create a sustainable system that embodies the flexible partnership between the public and private sectors. Empower individuals to better manage their own health with an easily accessible and transparent system, resulting in better health outcomes for our citizens."

Appendix C – Committee Roles and Responsibilities

Executive Steering Committee
The Executive Steering Committee is the internal leadership and governance committee established to implement and ensure that efforts undertaken by CT HealthIT are put into sustainable operation. The committee will: (1) Establish guiding principles for participating agencies, programs and processes; (2) Establish organizational structures which foster a culture of interoperability among the participating agencies and its programs; (3) Ensure strategic and appropriate use of state and federal funds for enterprise interoperability initiatives; and (4) Adopt processes that ensure accurate identification of persons served across participating agencies and programs.

Operational Committee
The Operational Committee will: (1) Review and recommend strategic objectives for deployment of enterprise IT initiatives. These strategic objectives will cover areas of Business, Information and Technology Architecture at the enterprise level; (2) Review and recommend standards for project planning and artifact documentation. Documentation standards should be the minimum necessary to ensure compliance with enterprise architecture standards (business, information and technical). Documentation standards should vary depending on the project proposal maturity; (3) Final review of business application proposals for their alignment with adopted strategic objectives and approval of agency projects moving forward based on this alignment; and (4) Support the Executive Steering Committee by reviewing Subcommittee recommendations, recommending appropriate changes, reviewing the architecture compliance of HIT Projects, and providing technical guidance as needed.

Business Architecture Sub-Committee
The Business Architecture Sub-Committee will: (1) Ensure that statewide, or multi-agency strategies are incorporated into CT HealthIT Framework plans based on identified enterprise business architecture standards and enterprise strategic objectives as they relate to business issues; (2) Review and provide business recommendations to guide enterprise IT standards and policies to the Operational Committee and the Enterprise Project Management Office; (3) Ensure that business operations related to multi-agency technical initiatives are in alignment with the Framework To-Be Business Architecture Standards and Strategic Objectives; (4) Ensure that statewide, or multi-department strategies are incorporated into enterprise and individual organizational change management needs of each agency; and (5) Ensure that high level business and functional requirements address the business need and are in alignment with enterprise business standards and proper business process maps are provided to ensure agencies document requirements adequately.

Information Architecture Sub-Committee
The Information Architecture Sub-Committee will: (1) Ensure statewide data sharing and enable interoperability; (2) Define the data management strategy, conceptual

data model, logical data model, and data standards; (3) Review and provide recommendations for opportunities to share data based on standards, guidelines, and policies - establish uniform policies and procedures for collecting, standardizing, managing, and evaluating data; (4) Ensure maximum reuse of data and identify redundancies to make information collection and sharing effective and efficient; (5) Ensure appropriate administrative, technical and physical safeguards to protect the data from disclosure to any unauthorized persons; (6) Identify new business processes; (7) Identify information that is no longer used; and (8) Improve system-effectiveness, facilitate growth and innovation, lower over-all life-cycle costs.

Technical Architecture Sub-Committee

The Technical Architecture Sub-Committee will: (1) Ensure that technical operations related to multi-agency initiatives are in alignment with the Project Plan and the Enterprise Architecture Review; (2) Ensure that statewide, or multi-department strategies are incorporated into Ct HealthIT Framework plans; (3) Review and provide technical recommendations for implementing IT standards, guidelines, and policies; and (4) Review project artifact packets including: Enterprise Architecture Review (EAR), Project Baseline Review (PBR), Requirements Review (RR), Detailed Design Review (DDR), Operational Analysis Review (OAR).

Enterprise Project Management Office

The Enterprise Project Management Office (EMPO) will: (1) provide project support for CT HealthIT initiatives; (2) coordinate multiple initiatives at every level; (3) garner support among agency leaders and the initiative's key stakeholders; (4) identify and secure funding; (5) organize meetings, set agendas, create reports, communications and foundational document; (6) coordinate the work of the Executive Steering and Operational committees and subcommittees; and (7) liaise with partners and stakeholders.

The EPMO will be staffed by (1) the EMPO Director that provides overall management of the PMO activities, assigns a Project Manager to projects approved by the Operational Committee, and is an initial escalation point for project risks and issues; (2) the Deputy EPMO Director that assigns Project Management Analyst to potential projects, facilitates internal priority setting meetings, is responsible for identifying project and program measurements, and is responsible for program level reporting; (3) Project Management Analyst (2-3 FTEs) that are assigned once a project has been identified by an Agency Committee, shepherds the projects submitted by the Agency though the Subcommittee and Operational Committee approval process, and supports planning, metrics and reporting of approved projects; (4) Project Manager (3-4 FTEs) that are assigned once a project has been approved by the Operational Committee, has primary responsibility for the successful project completion, ensures that project processes are being followed, is responsible for project scheduling and tracking, and reports on project status to the Executive Steering Committee. It is envisioned that the Agency will assign an Agency PM or Lead that will work with the EPMO Project Manager to ensure proper human and technical resources are identified and incorporated into the project team.

Appendix D – Public Act 15-146 (Sections 20-26)

Senate Bill No. 811

Public Act No. 15-146

AN ACT CONCERNING HOSPITALS, INSURERS AND HEALTH CARE CONSUMERS.

...

Sec. 20. (NEW) (*Effective October 1, 2015*) (a) For purposes of this section:

(1) "Affiliated provider" means a health care provider that is: (A) Employed by a hospital or health system, (B) under a professional services agreement with a hospital or health system that permits such hospital or health system to bill on behalf of such health care provider, or (C) a clinical faculty member of a medical school, as defined in section 33-182aa of the general statutes, that is affiliated with a hospital or health system in a manner that permits such hospital or health system to bill on behalf of such clinical faculty member;

(2) "Certified electronic health record system" means a health record system that is certified by the federal Office of the National Coordinator for Health Information Technology;

(3) "Electronic health record" means any computerized, digital or other electronic record of individual health-related information that is created, held, managed or consulted by a health care provider and may include, but need not be limited to, continuity of care documents, discharge summaries and other information or data relating to patient demographics, medical history, medication, allergies, immunizations, laboratory test results, radiology or other diagnostic images, vital signs and statistics;

(4) "Electronic health record system" means a computer-based information system that is used to create, collect, store, manipulate, share, exchange or make available electronic health records for the purposes of the delivery of patient care;

(5) "Health care provider" means any individual, corporation, facility or institution licensed by the state to provide health care services;

(6) "Health information blocking" means (A) knowingly interfering with or knowingly engaging in business practices or other conduct that is reasonably likely to interfere with the ability of patients, health care providers or other authorized persons to access, exchange or use electronic health records, or (B) knowingly using an electronic health record system to both (i) steer patient referrals to affiliated providers, and (ii) prevent or unreasonably interfere with patient referrals to health care providers who are not affiliated providers but shall not include legitimate referrals between providers participating in an accountable care organizations or similar value-based collaborative care models;

(7) "Hospital" has the same meaning as provided in section 19a-490 of the general statutes;

(8) "Health system" has the same meaning as provided in section 19a-508c of the general statutes, as amended by this act;

(9) "Seller" means any person or entity that directly, or indirectly through an employee, agent, independent contractor, vendor or other person, sells, leases or offers to sell or lease an electronic health record system or a license or right to use an electronic health record system.

(b) Electronic health records shall, to the fullest extent practicable,

(1) follow the patient, (2) be made accessible to the patient, and (3) be shared and exchanged with the health care provider of the patient's choice in a timely manner.

(c) Health information blocking shall be an unfair trade practice pursuant to section 42-110b of the general statutes.

(d) Health information blocking by a hospital, health system or seller shall be subject to the penalties contained in subsection (b) of section 42-110o of the general statutes.

(e) It shall be an unfair trade practice pursuant to section 42-110b of the general statutes for any seller to make a false, misleading or deceptive representation that an electronic health record system is a certified electronic health record system.

(f) The provisions of this section shall be enforced by the Attorney General.

(g) Nothing contained in this section shall be construed as a limitation upon the power or authority of the state, the Attorney General or the Commissioner of Consumer Protection to seek administrative, legal or equitable relief as provided by any state statute or common law.

Sec. 21. (NEW) (*Effective from passage*) (a) There shall be established a State-wide Health Information Exchange to empower consumers to make effective health care decisions, promote patient-centered care, improve the quality, safety and value of

health care, reduce waste and duplication of services, support clinical decision-making, keep confidential health information secure and make progress toward the state's public health goals.

(b) It shall be the goal of the State-wide Health Information Exchange to: (1) Allow real-time, secure access to patient health information and complete medical records across all health care provider settings; (2) provide patients with secure electronic access to their health information; (3) allow voluntary participation by patients to access their health information at no cost; (4) support care coordination through real-time alerts and timely access to clinical information; (5) reduce costs associated with preventable readmissions, duplicative testing and medical errors; (6) promote the highest level of interoperability; (7) meet all state and federal privacy and security requirements; (8) support public health reporting, quality improvement, academic research and health care delivery and payment reform through data aggregation and analytics; (9) support population health analytics; (10) be standards-based; and (11) provide for broad local governance that (A) includes stakeholders, including, but not limited to, representatives of the Department of Social Services, hospitals, physicians, behavioral health care providers, long-term care providers, health insurers, employers, patients and academic or medical research institutions, and (B) is committed to the successful development and implementation of the State-wide Health Information Exchange.

(c) All contracts or agreements entered into by or on behalf of the state relating to health information technology or the exchange of health information shall be consistent with the goals articulated in subsection (b) of this section and shall utilize contractors, vendors and other partners with a demonstrated commitment to such goals.

(d) (1) The Commissioner of Social Services, in consultation with the Secretary of the Office of Policy and Management and the State Health Information Technology Advisory Council, established pursuant to section 25 of this act, shall, upon the approval by the State Bond Commission of bond funds authorized by the General Assembly for the purposes of establishing a State-wide Health Information Exchange, develop and issue a request for proposals for the development, management and operation of the State-wide Health Information Exchange. Such request shall promote the reuse of any and all enterprise health information technology assets, such as the existing Provider Directory, Enterprise Master Person Index, Direct Secure Messaging Health Information Service provider infrastructure, analytic capabilities and tools that exist in the state or are in the process of being deployed.

(2) Such request for proposals may require an eligible organization responding to the request to: (A) Have not less than three years of experience operating either a state-wide health information exchange in any state or a regional exchange serving a population of not less than one million that (i) enables the exchange of patient health information among health care providers, patients and

other authorized users without regard to location, source of payment or technology, (ii) includes, with proper consent, behavioral health and substance abuse treatment information, (iii) supports transitions of care and care coordination through real-time health care provider alerts and access to clinical information, (iv) allows health information to follow each patient, (v) allows patients to access and manage their health data, and (vi) has demonstrated success in reducing costs associated with preventable readmissions, duplicative testing or medical errors; (B) be committed to, and demonstrate, a high level of transparency in its governance, decision-making and operations; (C) be capable of providing consulting to ensure effective governance; (D) be regulated or administratively overseen by a state government agency; and (E) have sufficient staff and appropriate expertise and experience to carry out the administrative, operational and financial responsibilities of the State-wide Health Information Exchange.

(e) Notwithstanding the provisions of subsection (d) of this section, if, on or before January 1, 2016, the Commissioner of Social Services, in consultation with the State Health Information Technology Advisory Council, established pursuant to section 25 of this act, submits a plan to the Secretary of the Office of Policy and Management for the establishment of a State-wide Health Information Exchange consistent with subsections (a), (b) and (c) of this section, and such plan is approved by the Secretary, the commissioner may implement such plan and enter into any contracts or agreements to implement such plan.

(f) The Department of Social Services shall have administrative authority over the State-wide Health Information Exchange.

Sec. 22. (NEW) (*Effective from passage*)

(a) For purposes of this section:

(1) "Health care provider" means any individual, corporation, facility or institution licensed by the state to provide health care services; and

(2) "Electronic health record system" means a computer-based information system that is used to create, collect, store, manipulate, share, exchange or make available electronic health records for the purposes of the delivery of patient care.

(b) Not later than one year after commencement of the operation of the State-wide Health Information Exchange, each hospital licensed under chapter 368v of the general statutes and clinical laboratory licensed under section 19a-30 of the general statutes shall maintain an electronic health record system capable of connecting to and participating in the State-wide Health Information Exchange and shall apply to begin the process of connecting to, and participating in, the State-wide Health Information Exchange.

(c) Not later than two years after commencement of the operation of the State-wide Health Information Exchange, each health care provider with an electronic health record system capable of connecting to, and participating in, the State-wide Health Information Exchange shall apply to begin the process of connecting to, and participating in, the State-wide Health Information Exchange.

Sec. 23. Section 4-60i of the general statutes is repealed and the following is substituted in lieu thereof (*Effective July 1, 2015*):

(a) As used in this section:

(1) "Electronic health information system" means an information processing system, involving both computer hardware and software that deals with the storage, retrieval, sharing and use of health care information, data and knowledge for communication and decision making, and includes: (A) An electronic health record that provides access in real time to a patient's complete medical record; (B) a personal health record through which an individual, and anyone authorized by such individual, can maintain and manage such individual's health information; (C) computerized order entry technology that permits a health care provider to order diagnostic and treatment services, including prescription drugs electronically; (D) electronic alerts and reminders to health care providers to improve compliance with best practices, promote regular screenings and other preventive practices, and facilitate diagnoses and treatments; (E) error notification procedures that generate a warning if an order is entered that is likely to lead to a significant adverse outcome for a patient; and (F) tools to allow for the collection, analysis and reporting of data on adverse events, near misses, the quality and efficiency of care, patient satisfaction and other healthcare-related performance measures.

(2) "Interoperability" means the ability of two or more systems or components to exchange information and to use the information that has been exchanged and includes: (A) The capacity to physically connect to a network for the purpose of exchanging data with other users; and (B) the capacity of a connected user to access, transmit, receive and exchange usable information with other users.

(3) "Standard electronic format" means a format using open electronic standards that: (A) Enable health information technology to be used for the collection of clinically specific data; (B) promote the interoperability of health care information across health care settings, including reporting to local, state and federal agencies; and (C) facilitate clinical decision support.

[(a)**]** (b) The Commissioner of Social Services shall (1) develop, throughout the Departments of Developmental Services, Public Health, Correction, Children and Families, Veterans' Affairs 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)**]** (c) The Commissioner of Social Services shall, in consultation with **[**the Departments of Public Health and Mental Health and Addiction Services**]** the Health Information Technology Advisory Council, established pursuant to section 25 of this act, implement and periodically revise the state-wide health information technology plan established pursuant to **[**section 19a-25d**]** this section 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.**]**

(d) The Commissioner of Social Services shall, within existing resources and in consultation with the State Health Information Technology Advisory Council: (1) Oversee the development and implementation of the State-wide Health Information Exchange in conformance with section 21 of this act; (2) coordinate the state's health information technology and health information exchange efforts to ensure consistent and collaborative cross-agency planning and implementation; and (3) serve as the state liaison to, and work collaboratively with, the State-wide Health Information Exchange established pursuant to section 21 of this act to ensure consistency between the state-wide health information technology plan and the State-wide Health Information Exchange and to support the state's health information technology and exchange goals.

(e) The state-wide health information technology plan, implemented and periodically revised pursuant to subsection (c) of this section, shall enhance

interoperability to support optimal health outcomes and include, but not be limited to (1) general standards and protocols for health information exchange, and (2) national data standards to support secure data exchange data standards to facilitate the development of a state-wide, integrated electronic health information system for use by health care providers and institutions that are licensed by the state. Such electronic data standards shall (A) include provisions relating to security, privacy, data content, structures and format, vocabulary and transmission protocols, (B) be compatible with any national data standards in order to allow for interstate interoperability, (C) permit the collection of health information in a standard electronic format, and (D) be compatible with the requirements for an electronic health information system.

(f) Not later than February 1, 2016, and annually thereafter, the Commissioner of Social Services, in consultation with the State Health Information Technology Advisory Council, shall report in accordance with the provisions of section 11-4a to the joint standing committees of the General Assembly having cognizance of matters relating to human services and public health concerning: (1) The development and implementation of the state-wide health information technology plan and data standards, established and implemented by the Commissioner of Social Services pursuant to section 4-60i, as amended by this act; (2) the establishment of the State-wide Health Information Exchange; and (3) recommendations for policy, regulatory and legislative changes and other initiatives to promote the state's health information technology and exchange goals.

Sec. 24. (NEW) (*Effective October 1, 2015*) (a) For purposes of this section:

(1) "Electronic health record" means any computerized, digital or other electronic record of individual health-related information that is created, held, managed or consulted by a health care provider and may include, but need not be limited to, continuity of care documents, discharge summaries and other information or data relating to patient demographics, medical history, medication, allergies, immunizations, laboratory test results, radiology or other diagnostic images, vital signs and statistics;

(2) "Electronic health record system" means a computer-based information system that is used to create, collect, store, manipulate, share, exchange or make available electronic health records for the purpose of the delivery of patient care;

(3) "Health care provider" means any individual, corporation, facility or institution licensed by the state to provide health care services; and

(4) "Secure exchange" means the exchange of patient electronic health records between a hospital and a health care provider in a manner that complies with all state and federal privacy requirements, including, but not limited to, the Health

Insurance Portability and Accountability Act of 1996 (P.L. 104-191) (HIPAA), as amended from time to time.

(b) Each hospital licensed under chapter 368v of the general statutes shall, to the fullest extent practicable, use its electronic health records system to enable bidirectional connectivity and the secure exchange of patient electronic health records between the hospital and any other health care provider who (1) maintains an electronic health records system capable of exchanging such records, and (2) provides health care services to a patient whose records are the subject of the exchange. The requirements of this section apply to at least the following: (A) Laboratory and diagnostic tests; (B) radiological and other diagnostic imaging; (C) continuity of care documents; and (D) discharge notifications and documents.

(c) Each hospital shall implement the use of any hardware, software, bandwidth or program functions or settings already purchased or available to it to support the secure exchange of electronic health records and information as described in subsection (b) of this section.

(d) Nothing in this section shall be construed as requiring a hospital to pay for any new or additional information technology, equipment, hardware or software, including interfaces, where such additional items are necessary to enable such exchange.

(e) The failure of a hospital to take all reasonable steps to comply with this section shall constitute evidence of health information blocking pursuant to section 20 of this act.

(f) A hospital that connects to, and actively participates in, the State- wide Health Information Exchange, established pursuant to section 21 of this act shall be deemed to have satisfied the requirements of this section.

Sec. 25. (NEW) (*Effective July 1, 2015*) (a) There shall be a State Health Information Technology Advisory Council to advise the Commissioner of Social Services in developing priorities and policy recommendations for advancing the state's health information technology and health information exchange efforts and goals and to advise the commissioner in the development and implementation of the state-wide health information technology plan and standards and the State-wide Health Information Exchange, established pursuant to section 21 of this act. The advisory council shall also advise the commissioner regarding the development of appropriate governance, oversight and accountability measures to ensure success in achieving the state's health information technology and exchange goals.

(b) The council shall consist of the following members:

(1) The Commissioners of Social Services, Mental Health and Addiction Services, Children and Families, Correction, Public Health and Developmental Services, or the commissioners' designees;

(2) The Chief Information Officer of the state, or the Chief Information Officer's designee;

(3) The chief executive officer of the Connecticut Health Insurance Exchange, or the chief executive officer's designee;

(4) The director of the state innovation model initiative program management office, or the director's designee;

(5) The chief information officer of The University of Connecticut Health Center, or said chief information officer's designee;

(6) The Healthcare Advocate, or the Healthcare Advocate's designee;

(7) Five members appointed by the Governor, one each of whom shall be (A) a representative of a health system that includes more than one hospital, (B) a representative of the health insurance industry, (C) an expert in health information technology, (D) a health care consumer or consumer advocate, and (E) an employee or trustee of a plan established pursuant to subdivision (5) of subsection (c) of 29 USC 186.

(8) Two members appointed by the president pro tempore of the Senate, one each who shall be (A) a representative of a federally qualified health center, and (B) a provider of behavioral health services;

(9) Two members appointed by the speaker of the House of Representatives, one each who shall be (A) a representative of an outpatient surgical facility, and (B) a provider of home health care services;

(10) One member appointed by the majority leader of the Senate, who shall be a representative of an independent community hospital;

(11) One member appointed by the majority leader of the House of Representatives, who shall be a physician who provides services in a multispecialty group and who is not employed by a hospital;

(12) One member appointed by the minority leader of the Senate, who shall be a primary care physician who provides services in a small independent practice;

(13) One member appointed by the minority leader of the House of Representatives, who shall be an expert in health care analytics and quality analysis;

(14) The president pro tempore of the Senate, or the president's designee;

(15) The speaker of the House of Representatives, or the speaker's designee;

(16) The minority leader of the Senate, or the minority leader's designee; and

(17) The minority leader of the House of Representatives, or the minority leader's designee.

(c) Any member appointed or designated under subdivisions (8) to (17), inclusive, of subsection (c) of this section may be a member of the General Assembly.

(d) All appointments to the council shall be made not later than August 1, 2015. The Commissioner of Social Services shall schedule the first meeting of the council, which shall be held not later than September 1, 2015. The Commissioner of Social Services shall serve as a chairperson of the council. The council shall elect a second chairperson from among its members, who shall not be a state official. The council shall meet not less than three times prior to January 1, 2016. The terms of the members shall be coterminous with the terms of the appointing authority for each member and subject to the provisions of section 4-1a of the general statutes. If any vacancy occurs on the council, the appointing authority having the power to make the appointment under the provisions of this section and shall appoint a person in accordance with the provisions of this section. A majority of the members of the council shall constitute a quorum. Members of the council shall serve without compensation, but shall be reimbursed for all reasonable expenses incurred in the performance of their duties.

(e) Prior to submitting any application, proposal, planning document or other request seeking federal grants, matching funds or other federal support for health information technology or health information exchange, the Commissioner of Social Services shall present such application, proposal, document or other request to the council for review and comment.

Sec. 26. Section 4-60j of the general statutes is repealed and the following is substituted in lieu thereof (*Effective October 1, 2015*):

In fulfilling his or her responsibilities under sections 4-60i, as amended by this act, and 4-60*l* and complying with the requirements of **[**section 19a-25d**]** said sections, the 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.

Appendix E – Interagency Agreement (Under Revision)

For questions, please contact, **Minakshi Tikoo, PhD, MBI, MS, MSc, HHS HIT Coordinator, Connecticut** Department of Social Services, 55 Farmington Avenue, Hartford, CT, 06105, minakshi.tikoo@ct.gov