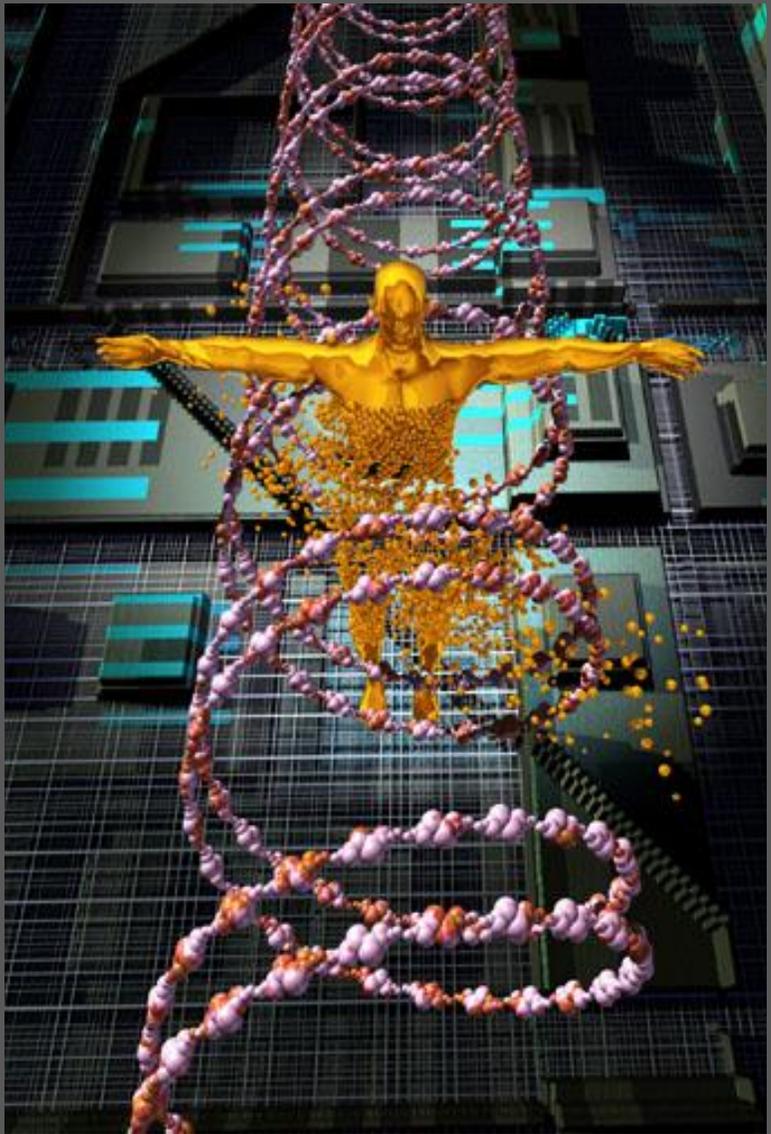


# Integrating Connecticut's Health Information Technology: A White Paper



Prepared by the  
Health Technology Work Group of  
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# White Paper

## Integrating Connecticut's Health Information Technology

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#### I. EXECUTIVE SUMMARY

The goals of integrated Health Information Technology are to *improve health outcomes; lower operating costs* and *provide citizens with far greater convenience and flexibility* to receive care with appropriate *assurances of privacy*. Greatly enhanced federal funding is now available for a limited timeline to help states transform decades of investment in standalone systems into a more comprehensive and interconnected technology infrastructure. We propose optimizing the state's human services and HIT investments should be considered an urgent strategic priority.

Multiple efforts are currently underway to modernize the health and human services (CT-HHS) agencies' information systems. There is no reliable coordination across these efforts focused on creating an interoperable and efficient set of technologies. Given the strategic importance of information technology and the magnitude of the investments, the Health Technology Work Group (HTWG) believes that the current state governance and management structures must be aligned to permit clear strategic accountability.

The HTWG recommends the creation of the CT Office of Health Information Technology Coordinator and a supporting organization responsible for the integration of all the agencies HIT investments. Acting under the authority of the Governor, the position should report directly to the Office of the Governor or the Lieutenant Governor. An Executive Steering Committee and a private sector Stakeholder Council should guide this role. The Steering Committee would be made up of Commissioners of the Health and Human Services Cabinet (DCF, DDS, DMHAS, DPH, DSS, DOC), the State's CIO, Director of IT Policy, Health Information Exchange CEO, and the Health Insurance Exchange CEO, chaired by the State HIT Coordinator. The Stakeholder Council should include representatives from hospitals, ancillary support services, researchers, and other health providers.

The mission of the Office would be to establish a statewide framework for enabling technologies and processes that support improved program administration for the State's Health and Human Services (HHS) Enterprise and for stakeholders dedicated to improving health outcomes and administrative procedures for individuals receiving services through state health and human service agencies. The primary goal of the office would be to define and measure statewide progress against an integrated Health Information Technology framework. Individual project investments should be measured against reuse of the framework or contribution to statewide new capability and sustainability. The Framework is not intended to create a

restrictive bureaucratic structure presenting barriers to implementation; rather we intend to create an environment of innovation, flexibility, alignment, and accountability for this critical work.

The HTWG also recommends the creation of a convening HIT-Business Forum that, on a regular basis will bring public and private sector HIT-Business stakeholders together to share ideas, exchange knowledge about emerging technologies to support the health reform goals and objectives and share best practices.

The HTWG will support a timely transition from its current role and *modus operandi* to a designated State Office of HIT Coordination. Given the urgency and the importance of the re-organization the transition should begin immediately and be completed by December of 2012.

## II. CONTEXT AND PURPOSE

This White Paper presents a rationale for and a recommendation to the Health Care Cabinet in support of a rational State Health Information Technology investment strategy. The paper reflects the deliberations of the Health Technology Work Group (HTWG) over the last ten months.

The Affordable Care Act (ACA) of 2010 and the State's Health Reform goals offer an unprecedented opportunity to refresh and reconstruct the infrastructure of Connecticut's health information technology (HIT). The window of opportunity to capitalize on the current unusually favorable terms is, however relatively brief. Because similar conditions are unlikely to present themselves in the foreseeable future, optimizing the state's human services HIT investments should be considered an urgent strategic priority.

Access to federal dollars would make it possible to make major capital investments and further position CT as a national leader in health technology- a strategy that aligns well with other major investments supported by this administration and the state legislature. Health reform allows the state to simultaneously revamp and render interoperable core components of the state human services information technology; to launch a Health Insurance Exchange (HIX) platform and to deploy a state-wide Health Information Exchange (HIE). This multi-pronged approach is in keeping with a vision of a vastly more efficient, effective, integrated, patient centered and equitable system.

Health reform is also driving substantial health information technology investments in the private sector. Physician practices, clinics, hospitals, pharmacies, laboratories and other key delivery system stakeholders are acquiring electronic health records and are developing the capability to exchange health information in a meaningful way. The combined impact of focused and strategic public and private investments in HIT help deliver improved health outcomes and lower operating costs as well as availing citizens of far greater convenience and flexibility to receive care anywhere in the state (and beyond) with assurances of privacy and access to relevant previous medical history.

## III. CURRENT STATUS OF THE STATE HEALTH & HUMAN SERVICES IT

### Health Information Technology in CT

Multiple efforts are currently underway to modernize the health and human services (CT-HHS) agencies' information systems. Some of these efforts, CONN-ADE, HITE-CT, Developing the CT HIT Workforce initiative, the Regional Extension Center (REC) and CHIN precede ACA while the Health Insurance Exchange (HIX), and the DSS Modernization Project (ConneCT), are more recent and have been driven by the national health reform agenda. These initiatives are critically important. Efforts by those organizations and many more are laudable but they are only loosely interconnected. Their separate funding sources and the specific tactical goals they seek to achieve drive their separate actions.

### Coordination of the State's HIT Investments

Linking and coordinating all current state HIT efforts has been a priority voiced repeatedly by the Health Care Cabinet, the Office of Health Reform and Innovation, and multiple agency Commissioners. However, an assessment of the State's HIT coordination efforts by the Health Technology Work Group reveals the absence of convening structure or a single, highly visible and well-resourced state-wide health information technology coordinator charged with integrating multiple disparate operations into a cohesive plan. Given the strategic importance of information technology and the magnitude of the investment, the HTWG believes that the current governance and management structures do not permit clear strategic accountability. We believe that strong leadership endorsed at the highest level of the administration and a supporting organization is needed

to optimize resources, avoid duplication, needless delays or placement of disproportionate emphasis on some system components relative to others to the detriment of the whole.

#### IV. HTWG RECOMMENDATIONS

##### 1. Office of State HIT Coordinator

The Health Technology Work Group (HTWG) considered options for optimizing current and future HIT investments. After extensive internal deliberations, consultation with expert organizations within and outside the state we present a strong recommendation for the creation of a CT Office of Health Information Technology Coordinator. Such a position should function outside any one state agency; should report directly to the Governor or the Lieutenant Governor. The State HIT Coordinator will bring together “official” committees and working groups under one organization.

The State HIT Coordinator should build on the excellent work by the National Association of State Chief Information Officers (NASCIO) on the Technology Framework for Transforming Medicaid (MITA)<sup>1</sup>. The Framework can be adapted to more broadly (beyond Medicaid) guide the transformation of all the State’s health and human services agencies in the context of health reform.

In keeping with the MITA Framework the mission of the State HIT Coordinator can be stated as follows,

“To establish a statewide framework for enabling technologies and processes that support improved program administration for the State’s Health and Human Services (HHS) Enterprise and for all stakeholders dedicated to improving health outcomes and administrative procedures for individuals receiving services through state health and human service agencies.”

##### Goals

- Develop seamless and integrated systems that communicate effectively to achieve common HHS goals through interoperability and common standards
- Promote an environment that supports flexibility, adaptability and rapid response to changes in programs and technology
- Promote an enterprise view that supports enabling technologies that align with common HHS business process and technologies.
- Provide data that is timely, accurate, usable, and easily accessible in order to support analysis and decision making for health care management and program administration
- Provide performance measurements for accountability and planning
- Coordinate business strategies across the HHS Enterprise and provide IT support to enable their implementation.

##### Objectives

- Adopt industry standards for data exchange
- Promote reusable components through standard interfaces and modularity
- Promote efficient and effective data sharing to meet stakeholders needs
- Provide a beneficiary-centric focus
- Promote interoperability, integration and an open architecture
- Promote secure data exchange

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<sup>1</sup> CMS’s MITA 3.0 Framework

- Promote good practices (e.g.: The Capability Mature Model and data warehouse)

### The CT Health and Human Services Enterprise Architecture Framework

The following are three architecture segments that when combined create the State HIT Coordinator Framework (Fig. 1).

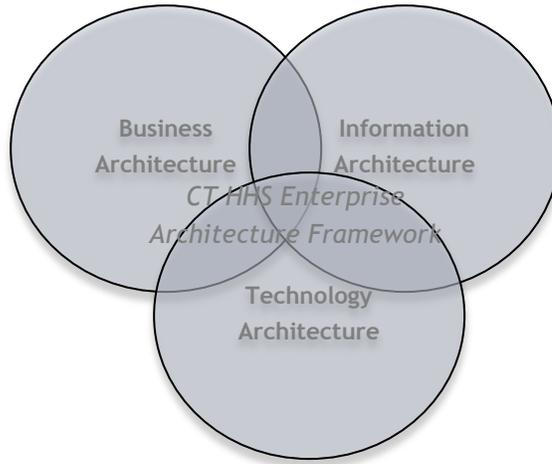


Figure 1

#### Business Architecture (BA)

Business architecture hosts a set of complexities that exist within the state government and are difficult to describe because of the numerous relationships and stakeholders involved. Major parts of Health and Human Services IT Business Architecture (HHSIB) and the CT HIT Coordinator Framework are business related and it is essential that these foundational components of the architecture framework have a clearly defined strategic intent.

Business architecture must start with an environmental context and provide the framework for improvements in the Health and Human Services enterprise operations. Improved outcomes for all stakeholders will come as a result of factoring in economic, legal, political, and citizen expectations.

#### Information Architecture (IA)

One of the key assets to the HHS enterprise is information. In order for HIT stakeholders to quickly and accurately transfer information, the data must first be organized into usable formats. Information architecture seeks to address the informational needs of the enterprise and align with the business processes of the information systems associated with these programs. Because the BA and IA together map enterprise data and business processes, this provides the basis for sharing information throughout the enterprise as well as organizational boundaries.

#### Technical Architecture (TA)

The technical architecture for the HHS enterprise will need to be flexible, reliable, scalable, and secure

system. By having increased flexibility it will allow technical architecture to conform to future requirements, like the increased eligibility and enrollment that will occur because of mandates set forth in the Affordable Care Act. Finding the right balance between technical agility and efficiency has always been challenging for states, but balancing these tools for success amongst stakeholders is imperative for success. The technical architecture framework is designed to assist state HIT Coordinator with a strategy and a roadmap for leveraging the latest advancements in technology from an enterprise perspective. States should consider the benefits of standards-based approach to building a HHS enterprise that facilitates the reuse of solutions and integrates Commercial Off-the-Shelf (COTS) products to reduce development and IT costs.

### State HIT Coordinator Governance Structure

A governance structure supporting the State HIT Coordinator should include an Executive Steering Committee made up of Commissioners of the Health and Human Services Cabinet (DCF, DDS, DMHAS, DPH, DSS, DOC), the State’s CIO, Director of IT Policy, Health Information Exchange CEO, and the Health Insurance Exchange CEO, chaired by the State HIT Coordinator (Fig. 2) This Executive Committee would have the responsibility of developing an enterprise HIT strategic plan that defines the scope of enterprise HIT Integration effort, oversee its implementation timeline and milestones, resolve funding issues and promote effective communication and collaboration among all stakeholders.

### Enterprise Management System Governance Structure

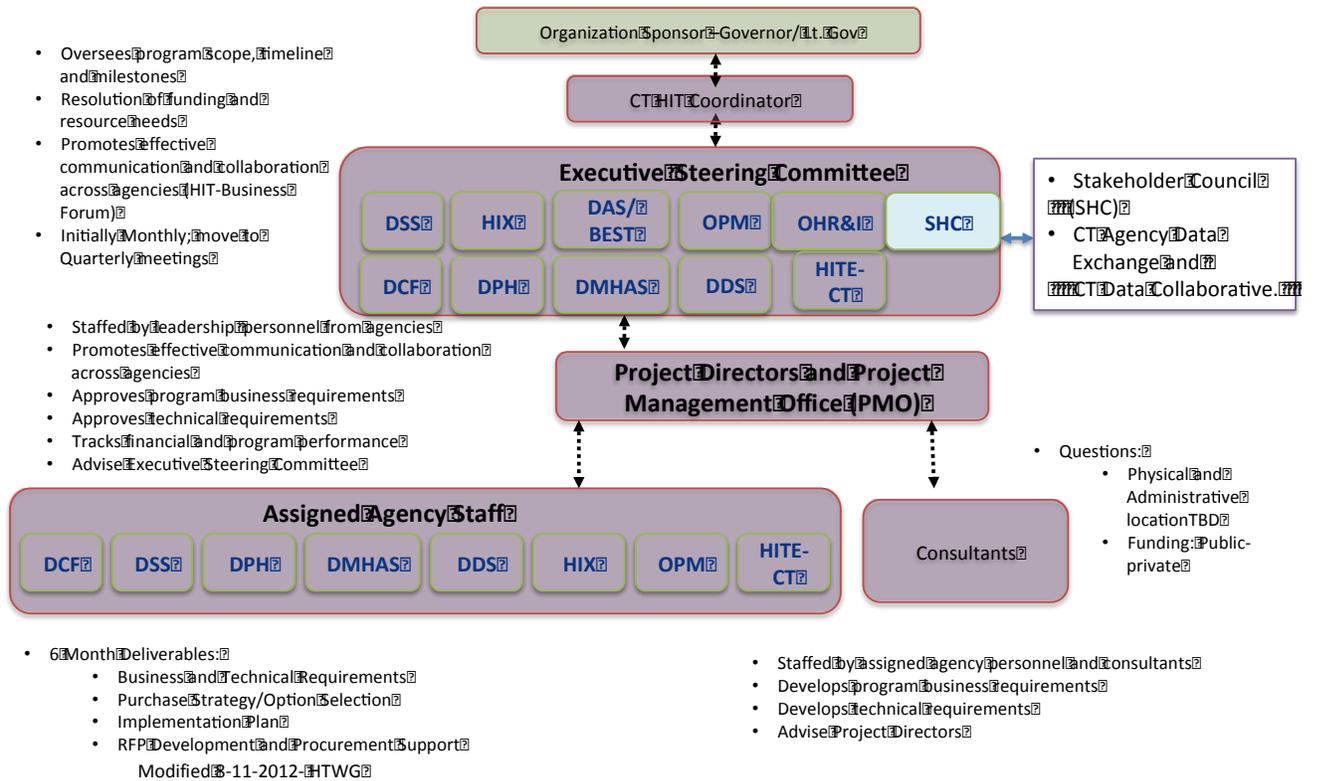


Figure 2

The State HIT Coordinator and the Executive Steering Committee should, in short order, ratify the Mission statement and develop a comprehensive work plan. Coordination efforts should include policy development and implementation. To maximize the benefits of federal matching dollars we envision a phased but aggressive HIT modernization plan for 2013-2018 responsive to short-term imperatives but keenly attentive to a long-term vision for an integrated, interoperable and equitable system. Short term enterprise priorities include the launching of the state's Health Insurance Exchange (HIX) by 2014, the deployment of a robust Health Information Exchange platform, upgrading the Medicaid eligibility system with a single health and human service eligibility entry point, development of a Master Patient Index, a Unique Provider Identifier, development and testing of inter-agency data sharing protocols, integration of programmatic rules and strengthening of privacy and security. Long-term priorities should include furthering system interoperability, elimination of disparities in access to information technology, lowering operational and maintenance costs, transition to a performance-based reimbursement system and overall enhancement of consumer service. Additional services should include shared analytics, business intelligence capabilities, case management, and population based public health information supported by shared service architecture. An interagency multi-sector work group, CONN-ADE as well as the Connecticut Data Collaborative should be contributing members of this integrative platform.

## 2. A State HIT-Business Forum

Developing a coherent State HIT-business strategy in which private and public sector investments are leveraged maximally to improve health outcomes for all CT residents, improve administrative efficiencies and lower health care costs requires an ongoing dialogue among business and HIT stakeholders. Alongside the creation of the CT Office of HIT Coordination the HTWG recommends the creation of a convening forum (HIT-Business Forum) that, on a regular basis will bring public and private sector HIT-Business stakeholders together to share ideas, exchange knowledge about emerging technologies to support the health reform goals and objectives and share best practices. The formulation of a Business, Technology and Information Architectures requires the ongoing Forum. A Stakeholder Council representing hospitals, ancillary support services (i.e.: community action agencies) researchers, and other health providers should be considered to provide a core participation group in the HIT Forum. Examples of how an HIT-Business Forum can promote efficiencies across the State health care system include leveraging Service Oriented Architecture and Cloud Computing systems. Other topics that merit dialogue and consensus building include seeking consensus on an information exchange consent policy and discussion about sustainability models for the HIE and Meaningful Use of electronic health records by Patient Centered Medical Home.

## V. TRANSITION

The HTWG is willing to support a timely transition from its current role and *modus operandi* to a designated State Office of HIT Coordination. Given the urgency and the importance of the re-organization the transition should begin immediately and be completed by December of 2012.