

2023

# ANNUAL REPORT: HEALTH INFORMATION TECHNOLOGY & HEALTH INFORMATION EXCHANGE

A REPORT PURSUANT TO CONN.GEN.STAT §17b-59a FOR  
THE CONNECTICUT GENERAL ASSEMBLY

**Deidre S. Gifford MD, MPH**

Executive Director, Connecticut Office of Health Strategy

**Sumit Sajnani**

Health Information Technology Officer

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# INTRODUCTION

In accordance with section 17b-59a of the Connecticut General Statutes, the Executive Director of the Office of Health Strategy (OHS), in consultation with the State Health Information Technology Advisory Council (HITAC), is required to report annually to the joint standing committees of the Connecticut General Assembly (CGA) on matters relating to:

- the development and implementation of a statewide health information technology plan,
- the establishment of electronic data standards,
- the establishment and implementation of the statewide Health Information Exchange (HIE),
- recommendations for policy, regulatory and legislative changes, and
- other initiatives to promote the state's health information technology and exchange goals.

The submission of this report by OHS marks the fourth report delivered to the joint standing committees of the General Assembly on statewide health IT initiatives. Many employees of OHS, other Connecticut state agencies, Connie (statewide HIE organization), external stakeholders and partners have been instrumental in accomplishing the work described in this report.

The Health IT and Health Information Exchange (HIE) Annual Report is organized into five sections that align with the General Assembly's mandate for annual reporting. Each section of the report provides an overview of the topic area with a progress report of work accomplished in Connecticut during 2022 to advance the interoperability and use of health IT systems, expand the use of HIE services, and increase the availability of accurate, actionable data on the quality and cost of healthcare services, social determinants of health, and population health outcomes.

Through strong commitments from the CGA, the Governor, the Lieutenant Governor, and through thousands of volunteer hours invested by dedicated organizations and individuals engaged with the Health Information Technology Advisory Council (HITAC), the All-Payer Claims Database (APCD) Advisory Group, and the Data Release Committee (DRC), Connecticut has developed technical and operational infrastructures to support statewide HIE services and conduct meaningful analytics through APCD data. The content of this reflects the progress that has been made despite the challenging years of the ongoing pandemic.

The information provided herein also identifies the need for continued investments from both the public and private sectors to:

- ensure technology systems are accessible and technical assistance is available to providers working in the sectors of healthcare and social services that are essential to the health and well-being of Connecticut's residents, but who were left out of federal incentive programs, especially for behavioral health providers, with impacts from the pandemic persisting;
- maintain sufficient resources within the state agencies responsible for planning, implementing, and operationalizing the policies, programs, strategies, and technology upgrades that have been outlined in Connecticut's Statewide Health IT Plan; and

- sustain operations of Connie, Connecticut’s statewide HIE service provider, until it can reach critical mass for self-sustainability, with public utility responsibilities for connecting all hospitals and provider organizations with electronic health record systems (EHRs) to the HIE infrastructure and enabling data exchange to flourish.

The leadership of OHS and Connie, and the members of the HITAC are grateful for the interest and support from the joint committees of the CGA and stand ready to provide additional information about the health IT and HIE programs and services described in the annual report.

## SECTION 1: STATEWIDE HEALTH INFORMATION TECHNOLOGY PLAN

Connecticut’s Statewide Health Information Technology (IT) Plan was finalized through a vote of the HITAC on December 16, 2021, after an extensive environmental scan was conducted and substantial stakeholder input was documented by OHS. The process to develop the Statewide Health IT Plan was described in detail in the 2022 Health IT and HIE Annual Report to the Connecticut General Assembly. Six focus areas were identified as priorities for making health IT and HIE investments, not only in technology systems, but also for adoption support, technical assistance, provider outreach and education, and consumer engagement. All are needed, along with policies and programmatic support, to ensure the goals of the Statewide Health IT Plan, to improve health outcomes, address health disparities, and reduce the escalation of healthcare costs. The six priority focus areas and the proposed implementation activities included in Connecticut’s Statewide Health IT Plan are listed below in Table 1.

*Table 1 Statewide Health IT Plan Focus Areas and Proposed Implementation Activities*

Areas of Focus	Proposed Activities in Statewide Health IT Plan
<b>Focus Area 1</b> Sustain and increase use of statewide HIE services	<ul style="list-style-type: none"> <li>▪ Charter a sustainability support workgroup for Connie</li> <li>▪ Create patient access to Connie</li> <li>▪ Evaluate centralized quality measurement</li> <li>▪ Evaluate in-house resources to support central quality measurement</li> <li>▪ Offer HIE onboarding payment incentives and technical assistance</li> <li>▪ Determine funding for statewide quality measurement and reporting</li> <li>▪ Offer provider education on ONC Information Blocking Rule</li> </ul>
<b>Focus Area 2</b> Implement systems to address health equity and health-related social needs	<ul style="list-style-type: none"> <li>▪ Social Services Design Group</li> <li>▪ Community Information Exchange (CIE) Feasibility Planning Committee</li> <li>▪ Health Equity Dashboard</li> <li>▪ IT infrastructure, staffing, and training</li> <li>▪ Statewide CIE Shared Services</li> </ul>
<b>Focus Area 3</b> Improve service coordination and data sharing across state HHS agencies	<ul style="list-style-type: none"> <li>▪ Public Health Gateway assessment</li> <li>▪ HHS Person-Centered Services Collaborative</li> <li>▪ IT workforce planning and investments</li> <li>▪ Connecting HHS data systems to Connie</li> <li>▪ Technical HHS Interoperability Workgroup</li> </ul>

<b>Focus Area 4</b> Support behavioral health providers with the adoption of EHR and HIE services	<ul style="list-style-type: none"> <li>▪ Behavioral health provider listening sessions on EHR / HIE concerns</li> <li>▪ Provider and patient educational campaign</li> <li>▪ Provider EHR / HIE technical assistance and training</li> <li>▪ Provider financial incentive program or hosted technology system providing care coordination capabilities</li> </ul>
<b>Focus Area 5</b> Protect individuals' health information privacy	<ul style="list-style-type: none"> <li>▪ Hold citizen town hall meetings on HIE and health data rights</li> <li>▪ Issue RFI/RFP for state agency consent management solution</li> <li>▪ Make recommendations on standard statewide consent protocols</li> <li>▪ Establish a Patient Health Information Protection Office</li> <li>▪ Support the development of educational resources for consumers</li> </ul>
<b>Focus Area 6</b> Establish Electronic Health Data Standards	<ul style="list-style-type: none"> <li>▪ Establish a Health Data Standards Workgroup</li> <li>▪ Make workgroup recommendations on health data standards</li> <li>▪ Propose legislative concepts on health data standards, as needed</li> <li>▪ Monitor national and federal data standards policy developments</li> </ul>

## Determining Priorities for Initial Implementation Activities

In January 2022, OHS staff surveyed HITAC members to assess the Council's initial priorities for pursuing initiatives and activities outlined in Connecticut's Statewide Health IT Plan. Ten potential activities, from a list of thirty suggested in the Statewide Health IT Plan (listed above in Table 1) were selected by OHS to send to HITAC members, with the request for ranking those in priority order for implementation by OHS. The survey results were presented to the HITAC at the March 2022 Council meeting, and a vote by Council members confirmed the direction of the initial implementation activities for the Statewide Health IT Plan in 2022 and early 2023. With the priority activities now underway, the process to survey HITAC members for their implementation priorities will be repeated annually, as Connecticut's Health IT Plan is intended to serve as an iterative guide for supporting the state's health improvement goals.

The four highest priorities for implementation from the 2022 HITAC survey, in order of the percentage of Council member responses were:

- Supporting behavioral health providers with the adoption of electronic health record systems and health information exchange services;
- Improving service coordination and data sharing across Connecticut's Health and Human Service (HHS) agencies;
- Establishing data standards to facilitate development of integrated data systems and advance interoperable data exchange; and
- Sustaining and increasing the use of Connie's statewide health information exchange services.

The progress of implementation activities in each of these priority areas and other accomplishments achieved in 2022 are described below.

# IMPLEMENTATION PRIORITY #1: SUPPORT BEHAVIORAL HEALTH PROVIDERS WITH EHR AND HIE ADOPTION

## Background

Nearly 100% of hospitals and a substantial majority of ambulatory healthcare clinics in the U.S. have now adopted EHRs, but some provider sectors, left out of the federal incentive programs, are still struggling to enter the age of digital health information. In Connecticut, for example, smaller behavioral health provider organizations have a lower adoption of information technology within their practice, limiting their capacity to digitally coordinate care with primary care providers or ensure their clients' medical records accurately represent the care that has been received. Some states are providing financial subsidies to incentivize behavioral health providers to adopt EHRs and connect to an HIE, with the aim of improving care coordination between primary care and behavioral health providers and increasing secure access to the medical information of individuals diagnosed with mental health conditions and/or substance use disorders.

Information collected from behavioral health providers during Connecticut's 2021 health IT environmental scan indicated a need for more engagement and education of behavioral health providers around the use of EHR technology, care coordination platforms, and health information exchange services, so that any future efforts to provide incentives and technical assistance will reflect understanding of the challenges related to the use of technology and data exchange in this specialty area.

There is a strong push for primary care and behavioral health integration to provide a more integrated experience of care and work within their communities to combat opioid addiction and provide children and adolescents with more responsive mental health services. The Statewide Health IT Plan identifies the imperatives for behavioral health providers to receive additional education, technical assistance, mentorship, and support for the use of EHR technology and/or care coordination platforms, and HITAC members prioritized this focus area for immediate investments of time and research. Work is underway to educate behavioral health providers and patients on the benefits and risks of health information exchange, with more research focusing on the ability for providers to access the right information at the right time for the best possible care, while ensuring individual privacy is honored.

## Progress

Over the course of 2022, significant effort went into establishing a common set of objectives between OHS and the Department of Mental Health and Addiction Services (DMHAS) to ensure the outreach and educational sessions being planned for engaging behavioral health providers would deliver coordinated messages and would support, rather than compete with other important initiatives underway in this field of care. The two agencies along with Connie aligned goals and messages on the engagement and substantial progress has been made. The first step for

engaging behavioral health providers has been to hold information sessions that have been designed to benefit providers, administrators, information technology staff, and organizational compliance officers in behavioral health settings. Invitations were sent to approximately 550 behavioral health provider organizations, and three informational sessions were held in October and November, to share background on the Statewide Health IT Plan, on Connie's HIE services, and on the requirements of provider organizations to connect with Connie by May 2023. Attendees included representation from:

- Connecticut State Medical Society
- Connecticut Academy of Family Physicians
- Connecticut Chapter of American Academy of Pediatrics
- Connecticut Psychiatric Association
- National Association of Social Workers – Connecticut Chapter
- Connecticut Council of Child and Adolescent Psychiatry
- Connecticut Counseling Association
- Connecticut Certification Board

With the information sessions completed, the next step for the behavioral health provider engagement is a series of listening sessions, scheduled in January & February of 2023. While the informational sessions were intended to help level-set understandings of the behavioral health provider community around health IT and HIE value propositions and to introduce the staff of Connie, as Connecticut's statewide HIE service organization, the planned listening sessions are designed to elicit feedback from behavioral health providers on topics that will include questions along the following lines:

- System and data interoperability -- how patient data is currently being shared for client referrals and for care coordination with other members of a client's care team, and how client records are updated with data from other sources?
- What is working well in the current state -- where are the "Bright Spots"?
- What types of concerns are behavioral health providers having about connecting to Connie (general, technical, patient privacy and confidentiality)?
- What types of data are most valuable to receive from other providers, in terms of informing treatment and services?
- What types of data are most valuable for other providers to receive from behavioral health providers?

The Connecticut Psychological Association is assisting in recruiting members to attend the listening sessions. An interim report with recommendations for addressing the issues and challenges captured through the listening sessions is expected to be shared with the HITAC in advance of the council meeting on March 16, 2023.

## IMPLEMENTATION PRIORITY #2: IMPROVE SERVICE COORDINATION AND DATA SHARING ACROSS STATE AGENCIES

### Background

There are significant opportunities to improve health outcomes for Connecticut residents by advancing electronic data sharing between agencies serving different needs of the same people. Connecticut is making major strides in advancing interagency data integration through the work of the [Data and Policy Analytics \(DAPA\)](#) unit of Connecticut's Office of Policy and Management (OPM). DAPA oversees the collection, analysis, coordination, and sharing of data, with staff who are responsible for developing and maintaining the [State Data Plan](#), the [CT Open Data Portal](#), the [Preschool Through Twenty Workforce Information Network \(P20 WIN\)](#), and the [GIS Office](#). The DAPA team, led by a Chief Data Officer, gathers data and provides [guidance for state agencies](#) on data sharing as part of the State Data Plan report, an annual document prepared for the CGA, with review by [Connecticut's Data Analysis Technology Advisory Board](#). DAPA also conducts analysis on the ways that state agencies are making a difference in the lives of their clients and communities through the [Evaluation and Impact Unit](#).

A toolkit for data-sharing agreements between state agencies is continually updated within the [Data Sharing Playbook](#), a trove of useful information that includes an annual report on [Legal Issues to Interagency Data Sharing](#) and an [Enterprise Memorandum of Understanding \(E-MOU\)](#) establishing guidelines for data sharing, governance, and security within the P20 WIN data governance framework.

The [Draft State Data Plan for 2023-2024](#) supports the HITAC priorities to improve service coordination and increase interagency data sharing with specific actions listed to:

- Continue support for efforts to improve collection and standardization of race, ethnicity and language data and to share health and human services data, as identified in the Five-Year Statewide Health IT Plan and updated REL standards.
- Identify options to address legal and technical questions on consent management to improve provision of services and safe, ethical and secure data sharing.

The visual representation below in Figure 1 illustrates the many overlaps of individuals being served by programs that are administered in different Connecticut agencies. In the current state, most of these programs do not have any access to data from other agencies, and there are challenges with data sharing or coordination of services between agencies.

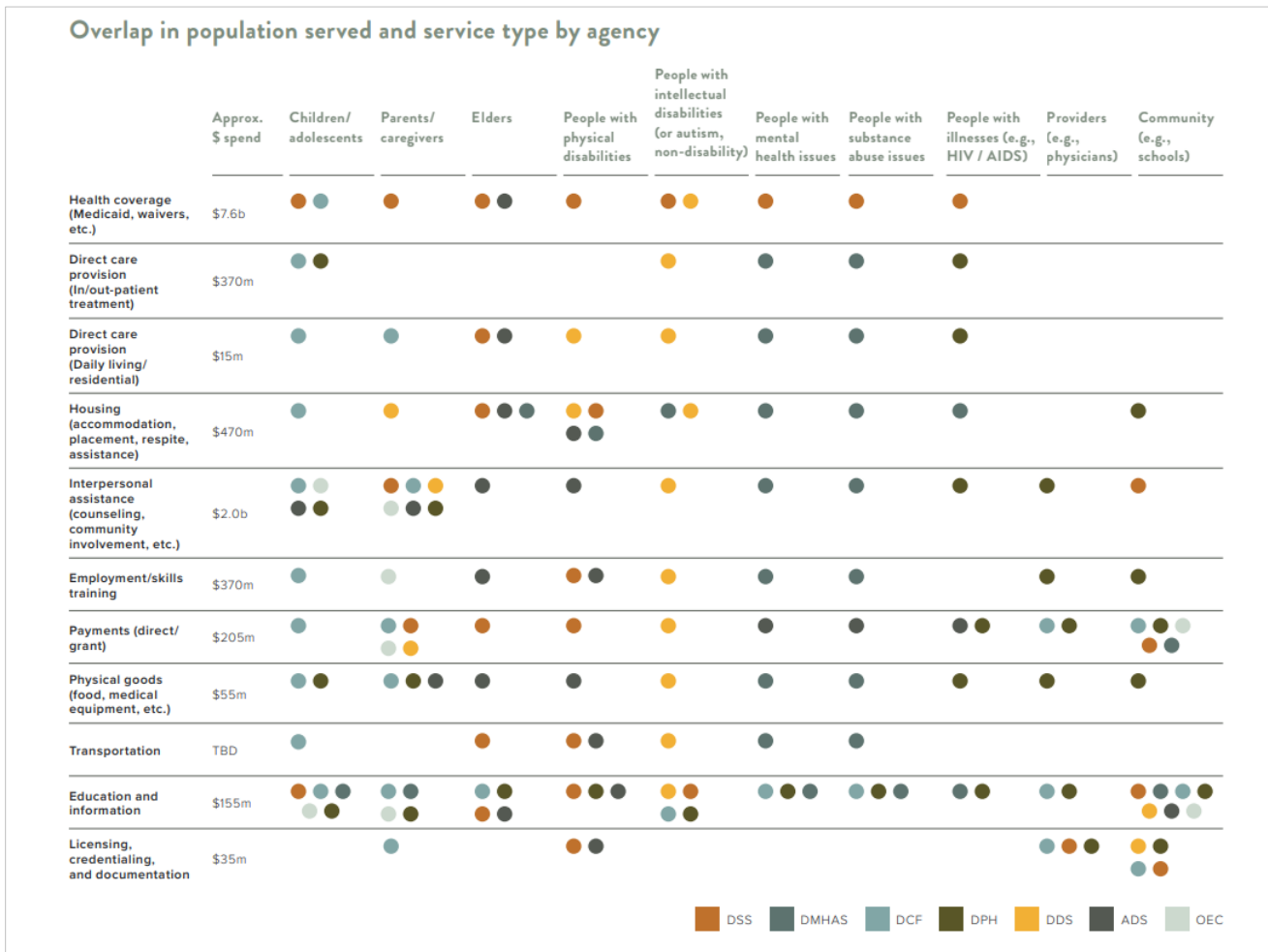


Figure 1: Connecticut State Agency Overlaps in Programs and Populations

Source: CT biennial budget FY2020-21 Addendum; agency and OPM input

## Progress

Working with individual agencies to explore their needs and working across agencies to bring multiple data sources to bear on unique problems or applications can be approached with similar processes of developing use cases, as practiced by Connie and other HIE organizations.

The Statewide Health IT Plan envisions a **Patient-Centered Services Collaborative (PCSC)** as a long-term interagency workgroup guided by common agreements developed for sharing data among programs serving overlapping populations. The PCSC’s primary goals will be to support and oversee details of connecting state agency data systems to Connie and to reduce barriers to data sharing between agencies. Both objectives will improve the coordination of care and services for individuals and families receiving aid from the state, making it more likely for services to contribute to improved health outcomes, and both efforts should have a dampening effect on the costs for duplicative services. The coordination of agencies in the PCSC could also result in the

streamlining of program eligibility over time, saving agencies money through administrative simplification and reducing red tape for program recipients with quicker access to services when needed most.

In late 2021 and early 2022 a joint endeavor between Office of Policy and Management (OPM) and OHS convened a series of four exploratory meetings with participation from eleven state agencies, (including OHS and OPM) to consider the Statewide Health IT Plan's recommendation for the formation of the Person-Centered Services Collaborative to increase interagency data sharing and service coordination between agencies. Over the course of the four meetings, presentations were made by individuals leading successful interagency programs and challenges were shared regarding interagency agreements and consent forms. A survey was distributed to participating agencies to collect information about data elements being collected in agencies at this time (see Appendix C).

The agencies that participated in the ad hoc workgroup were Department of Social Services (DSS), Department of Mental Health and Addiction Services (DMHAS), Department of Public Health (DPH), Department of Children and Families (DCF), Department of Developmental Services, Department of Housing, Office of Early Childhood (OEC), Department of Administrative Services (DAS), Office of the Healthcare Advocate, Office of Policy and Management (OPM), and Office of Health Strategy (OHS).

Following the final of the four planned meetings of the HHS Interagency Workgroup, a brief summary was prepared as a "*Concept Document for the Person-Centered Services Collaborative*" (included below along with Figure 2) with the goal of further socialization of the concept with agency heads and with the Office of the Governor, to determine a funding source for staff and contractor resources for the PCSC, and to consider whether OHS or OPM should take the organizational lead, assuming agency and executive branch leaders are in support of the idea.

### **Concept Paper Person-Centered Services Collaborative**

*The PCSC is envisioned as a multi-agency group of willing state agencies that provide services or oversee programs related to the health and well-being of the Connecticut population. Commissioners or Deputy Commissioners will participate voluntarily, with the **mission to provide more efficient, coordinated care and services to vulnerable individuals and families interacting with multiple agencies and programs**. It is expected the efforts of the PCSC will improve health equity through the delivery of more holistic, person-centered care and services.*

*The PCSC Executive Committee would be comprised of agency leadership, meeting quarterly to set priorities for PCSC Use Case Workgroups, develop strategies for ongoing policy needs and funding sources, and evaluate workgroup recommendations, as needed. The Workgroups will focus on specific problems defined by the PCSC Executive Committee, including, but not limited to, interagency data sharing policies, legal agreements, and technical capabilities and challenges of existing agency data systems. The PCSC Executive Committee will evaluate budget needs for Workgroup efforts, approve measures for pilot initiatives, review progress on measure*

achievement, and provide an annual report to OPM and the Office of the Governor on activities and milestones that may include:

1. *improving the interoperability of agency data systems;*
2. *improving the ability of agency staff to know when clients are served by multiple agencies;*
3. *easing the burden of executing interagency data sharing agreements;*
4. *improving the ability for clients to authorize data sharing between agencies providing care and services, and*
5. *improving the ability for agency staff to have access to clients' release of information and other authorization forms in their existing workflows and data systems.*

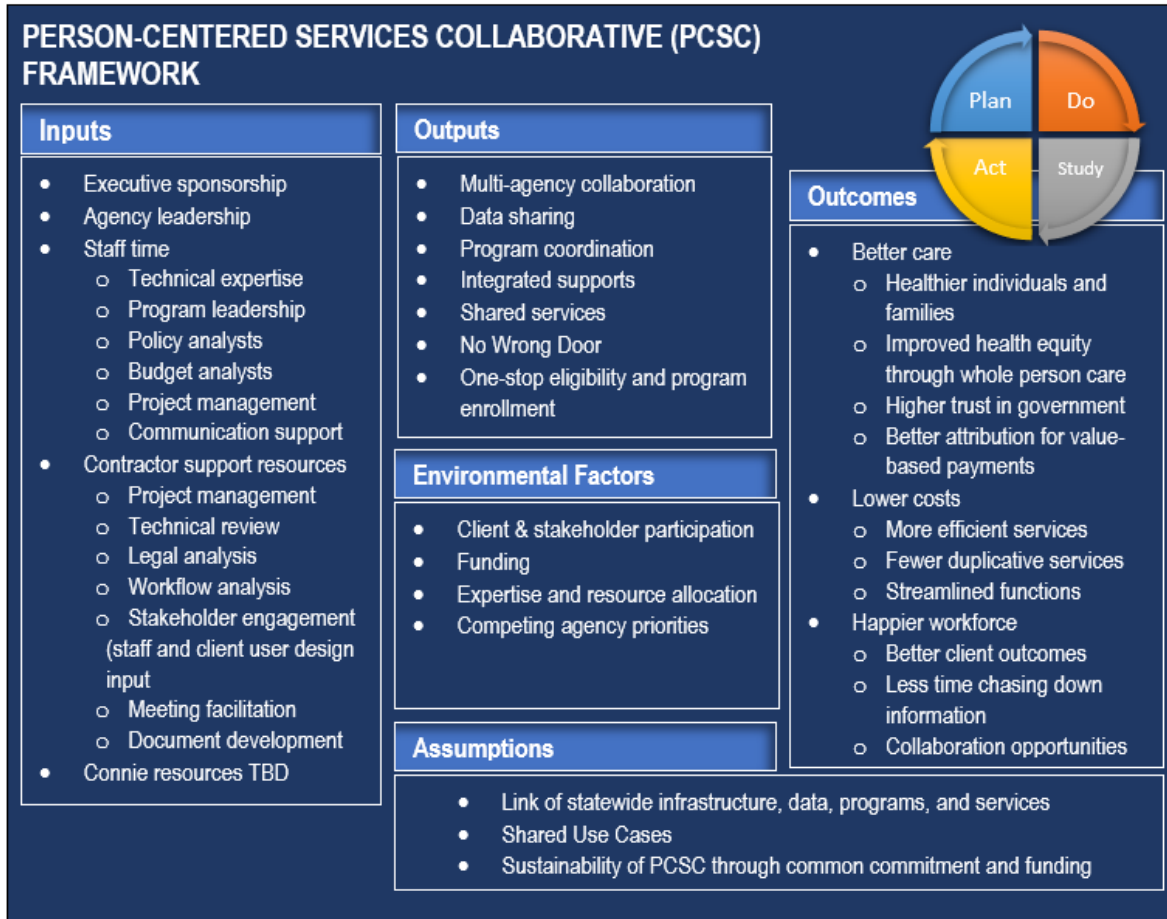
*The Health and Human Services Interagency Workgroup, organized by the OHS and OPM recommended three initial Use Case Workgroups to support the goals of the PCSC. The Workgroups will be comprised of individuals representing interested and willing agencies, with the subject matter expertise and skillsets needed to achieve the PCSC objectives.*

- ❖ *The **Common Interagency Identity Management Workgroup** would explore linking agency the master patient indexes (MPIs) in existing data systems to a Master Identity (ID) Source System that could be based on a client ID or a family ID. This Workgroup would make recommendations to the PCSC Executive Committee regarding approaches to developing a Master ID Source System.*
- ❖ *The **Common Interagency Consent Management Workgroup** would consider agency needs for a common consent form(s) for client release of information and interagency data sharing. This Workgroup would also review the cost and functional capabilities of consent management software solutions and make recommendations to the PCSC Executive Committee regarding the possible issuance of an RFP to evaluate consent management services.*
- ❖ *The **Common Interagency Standards Workgroup** would have multiple priorities over time, beginning with standards for common data sharing agreements. Future priorities could include standards for a common data dictionary across agency systems, considering common demographic data fields and formats for state agency data systems and working with Connie staff to develop an implementation guide for state agency data systems to connect and use various Connie data services.*

*The **PCSC Logic Model** shows a snapshot of the statewide landscape with initiatives, assumptions, and environmental factors that will support or hinder the objectives of the PCSC. The logic model integrates planning, implementation, and evaluation criteria to support the PCSC as necessary resources will be needed from willing agencies. The model can assist agency leadership in considering the opportunities for data linkages and system integrations to increase the value, continuity, and coordination of services to individuals and families in Connecticut.*

*It is suggested the PCSC Executive Committee and Workgroup members apply the principles of the **Plan, Do, Study, Act (PDSA)** method for evaluating PCSC objectives against metrics that are developed by the Executive Committee. Regular evaluation of progress and hindrances will help the PCSC Executive Committee and workgroups make nimble adjustments that will help ensure the processes for overseeing the work is trusted by all participating agencies, and support from the General Assembly and Office of the Governor is maintained.*

Figure 2: Framework for Patient-Centered Services Collaborative



## IMPLEMENTATION PRIORITY #3: ESTABLISH ELECTRONIC DATA STANDARDS

### Background

The OHS Executive Director, the Commissioner of the Department of Social Services, and the Health Information Technology Advisory Council are statutorily obligated to establish electronic data standards to facilitate the development of integrated electronic health information systems for use by healthcare providers and institutions that receive state funding (see Appendix D for details). This mandate includes provisions related to security, privacy, data content, structures and format, vocabulary, and transmission protocols. The statute requires limitations on the use and

dissemination of an individual's Social Security number, requires encryption of any Social Security number, and requires privacy standards no less stringent than those of the federal Health Insurance Portability and Accountability Act (HIPAA). Protected Health Information (PHI) must be traceable by an electronic audit trail, be compatible with any national data standards, and permit the collection of health information in a standard electronic format.

## Progress

To meet the provisions of Connecticut's statute, and in accordance with the Statewide Health IT Plan, a standing subcommittee of the HITAC has been proposed to review changes to federal standards and assess alignment with current Connecticut General Statutes. The Standards Advisory Committee would be comprised of stakeholders representing a cross section of relevant expertise in clinical care and healthcare delivery, digital health technologies, health analytics, health policy, and data privacy and security, with knowledge of state and federal regulations and reporting requirements for the healthcare and social services sectors. It will be critical for at least one member of this group to have strong familiarity with national and international healthcare standards development and standards implementation organizations (e.g., [FHIR](#); Health Level 7 [\[HL7\]](#), International Organization of Standardization [\[ISO\]](#), [DirectTrust](#), [Sequoia Project](#), [CARIN Alliance](#), and others).

The Standards Advisory Committee would monitor the regulatory environment and policy guidance issued at the national level through the Office of the National Coordinator for Health Information Technology (ONC) Interoperability Standards Advisory ([ISA](#)) for coordinating the identification, assessment, and determination of "recognized" interoperability standards and implementation specifications for industry use to fulfill specific clinical health IT interoperability needs, and will deliver annual recommendations to the DSS Commissioner and OHS Executive Director on any necessary revisions to Connecticut General Statutes relating to healthcare and social service data standards. The Standards Advisory Committee would meet quarterly to ensure the responsible parties named in statute have the information they need to provide relevant guidance, set appropriate policies, and communicate knowledgeably with members of the General Assembly and the Executive Branch on the challenges and opportunities inherent in these state requirements.

## Race, Ethnicity and Language (REL)

An example of Connecticut's commitment in action to developing data standards with substantial progress to report is in the *Race, Ethnicity & Language (REL) Data Standards and REL Implementation Plan*, resulting from the passage of [Public Act \(PA\) 21-35](#) is "to attain at least a seventy percent reduction in the racial disparities set forth in subdivisions (1) to (4), inclusive, of this subsection from the percentage of disparities determined by the commission on or before January 1, 2022."

In pursuit of this goal, PA 21-35 Section 11 mandates the Office of Health Strategy (OHS) to develop an implementation plan for REL data collection standards in alignment with the OHS Community and Clinical Integration Program (CCIP) recommendations, the U.S. Office of Management and Budget (OMB) race and ethnicity standards, and International Standards Organization (ISO), language standards to enable the aggregation and disaggregation of REL data. The legislation also mandates uniform collection of REL data to support the mission of the Commission on Racial Equity in Public Health to create a comprehensive strategic plan to eliminate health disparities and inequities across sectors. Availability of REL data will support development of targeted interventions to reduce racial disparities, and augment health care providers' continuous efforts to provide high quality, effective, timely, patient-centered, equitable care to all patients in Connecticut.

PA 21-35 REL mandate applies to:

- (1) "any state agency, board or commission that directly, or by contract with another entity, collects demographic data concerning the ancestry or ethnic origin, ethnicity, race or primary language of residents of the state in the context of health care or for the provision or receipt of health care services or for any public health purpose." The entities include but are not limited to agencies and contractors that provide clinical services, behavioral health services, community health services and support, and public health services and surveillance. These include:
  - Department of Social Services
  - Office of Health Strategy
  - Office of the Chief Medical Examiner
  - Department of Children and Families
  - Department of Mental Health and Addiction Services
  - Department of Developmental Services
  - Department of Public Health
  - Department of Veterans Affairs
  - Department of Correction
  - Department of Aging and Disability Services
- (2) "Each health care provider with an electronic health record system capable of connecting to and participating in the State-wide Health Information Exchange as specified in section 17b-59e of the general statutes shall, collect and include in its electronic health record system self-reported patient demographic data including, but not limited to, race, ethnicity, primary language, insurance status and disability status based upon the implementation plan developed under subsection (c) of this section."

## Race Ethnicity and Language Progress

In compliance with the legislation, OHS has produced the [REL Data Standards](#), a [REL Implementation Plan](#), and a [REL Implementation Guide](#) for mandated collectors. The REL standards document enumerates how to uniformly collect and code self-reported race, ethnicity, and language by clients/patients. Clients/patients are not required to provide REL data to receive care or services, however entities mandated by PA 21-35 to collect REL data must do so in alignment with the OHS REL Data Collection Standards as applicable.

Other undertakings by OHS as of the date of this report include:

- Active engagement in Yale Equity Research and innovation Center (ERIC) convenings commissioned by Connecticut Health Foundation (CHF) to support REL implementation across the state. These six convenings have included 104 stakeholders from 42 provider organizations and agencies throughout CT.
- Monthly convenings for impacted state agencies to support implementation of REL standards. These convenings serve as a learning community where representatives from impacted agencies can share approach, best practices, and work through challenges collectively. So far, OHS has held six state agency convenings which have included representatives from all impacted state agencies.
- Worked with DAS Bureau of Information Technology Solutions (BITS) in support technical enhancements of IT systems for REL compliance.
- Surveyed over 30 organizations for feedback on data standards document and implementation guide.
- Through stakeholder engagement, developed a common vision for REL implementation.

All impacted state agencies have commenced work on meeting the REL standards and as of the writing of this report one agency has completed its implementation. Progress and status of each state agency is as follows:

### Department of Social Services (DSS)

DSS has identified three IT systems impacted by PA 21-35, (1) ImpaCT, (2) Medicaid Management Information System (MMIS), and (3) Social Work Services System (SWSS). All three systems require modifications to comply with new REL standards. DSS has prioritized the SWSS system and is targeting completion of its enhancement and compliance by October 2023.

Other DSS initiatives pertaining to REL include:

- Use of REL standards to expand the way it represents race + ethnicity on its public facing, interactive People Served dashboard.
- Partner with OPM and OHS under a grant from Actionable Intelligence for Social Policy (AISP) to advance equity within the State's P20 WIN initiative.

### Office of Health Strategy (OHS)

OHS has identified four systems impacted by PA 21-35, (1) The All-Payer Claims Database (APCD), (2) Inpatient Database, (3) Outpatient Database, and (4) the Emergency Department Database. All four systems require modifications to meet new REL standards. OHS has prioritized the APCD system and is targeting completion of its enhancement and compliance by October 2023.

### **Office of the Chief Medical Examiner (OCME)**

Executive leadership at OCME is aware of and committed to the new REL Standards mandate. It is in the process of connecting its system with DPH's Electronic Death Registry System (EDRS). OCME expects the EDRS project to be completed before October 2023.

### **Department of Children and Families (DCF)**

DCF has identified two systems impacted by PA 21-35, (1) the SACWIS a.k.a. LINK, the DCF legacy system, and (2) Provider Information Exchange (PIE). Both systems will require modifications to meet new REL standards. The agency is conducting a feasibility study for upgrading both LINK and PIE systems. The PIE system is targeted for completion and compliance in 2023, whereas the LINK system requires additional review before modernization efforts can be undertaken.

### **Department of Veterans Affairs (DVA)**

DVA has identified the ADL Data system which is impacted by PA 21-35. This system will require modifications to meet new REL standards. DVA is targeting completion of its enhancement and compliance by October 2023.

### **Department of Mental Health and Addiction Services (DMHAS)**

DMHAS has identified two systems impacted by PA 21-35, (1) the Admission/Discharge/Transfer system (WITS), and (2) DMHAS Data Program (DDap). Both systems require modifications to comply with new REL standards. Due to the extent of the modifications needed, the systems will not be completed by October 2023. DMHAS intends to replace the WITS system in approximately two years with a new Electronic Health Record (EHR) system. The new EHR system will have the REL changes incorporated.

### **Department of Public Health (DPH)**

DPH has over 30 systems that are undergoing assessment to determine if they are impacted by PA 21-35. One of these, the Electronic Death Registry System (EDRS) has completed assessment and has been identified as needing modifications to comply with new REL standards. DPH has periodized enhancing this system by October 2023.

DPH is currently engaged in an interoperability project to support automated data exchange between the OCME Management system and the EDRS. This project will

support transfer of REL related data from EDRS to OCME bringing the OCME into compliance by the October 2023 timeframe.

DPH is in the beginning stages of a federally funded Data Modernization Initiative (DMI), which is an agency-wide effort to modernize its data systems and data-related policies and practices, bringing agency data strategy and management into alignment with industry standards and emerging expectations of the CDC. Full compliance with REL will be part of this initiative; however, this initiative will take considerable time to unfold as it is far-reaching in scope and deliverables, and it addresses agency systems and processes systematically and holistically.

### **Department of Development Services (DDS)**

DDS' eCAMRIS system is impacted by PA 21-35. This system requires modifications to meet new REL standards. DDS has targeted completion of system enhancement and compliance by October 2023. A durational project manager has been secured to assess and coordinate implementation efforts.

### **Department of Correction (DOC)**

DOC's inmate EHR system is in compliance with the new REL standards. It has no other systems impacted by PA 21-35.

### **Department of Aging and Disability Services (DADS)**

Agency legal counsel and IT units are assessing whether the agency has any systems that would be impacted by PA 21-35.

## **IMPLEMENTATION PRIORITY #4: SUSTAIN AND INCREASE THE USE OF HEALTH INFORMATION EXCHANGE SERVICES**

### **Background**

The sustainability of Connie is a top priority for Connecticut healthcare leaders and policymakers, and Connie's suite of HIE services should be considered a critical health utility for Connecticut residents. As the state's designated HIE entity, Connie is required to support all healthcare providers and hospitals as they establish connections between their EHR systems and Connie's technology infrastructure, with deadlines of May 2022 for hospitals and labs, and May 2023 for all other providers as set by the CGA. Connie is also required by federal and state statutes to provide all individuals in the state with access to their own health data, and work is underway to achieve that functionality.

Connie's original 5-year financial projections called for decreasing state funding over time as Connie services were rolled out and Connie achieved critical mass (a preponderance of Connecticut health care organizations contributing data to Connie), a key attribute of successful

and sustainable HIEs. Connie is aggressively meeting its charge to provide HIE services statewide and doing so will meet the state's objectives to lower overall healthcare costs while increasing the quality of healthcare residents of Connecticut can expect, with direct access to their healthcare information so they are empowered to make better healthcare decisions.

OHS and Connie are undertaking extensive outreach and multiple means of communication with hands-on enrollment support for provider groups to meet the state mandate. Connie is attempting to connect a large number of organizations at a rapid pace and provide access to multiple data feeds. A data feed is a way of sending structured, timely data from one electronic system to another. Connie is also focused on achieving the value proposition of the official statewide HIE. Small provider organizations may need financial and technical support to meet the mandate.

The Statewide Health IT Plan outlines several sustainability ideas for Connie to provide additional value for participants. Not every HIE participant will want or need every service offering, but it is important to consider additional data sources and data services as "ala carte" offerings for new and existing participants.

- When Connie is able to offer patient-mediated consent as a service, there will be the potential to support academic research and clinical trial use cases requiring informed consent from patients.
- Value-add services could include the provision of a quality measurement and reporting system to support value-based payment models, with a master data management hub to enable care coordination and community information exchange efforts. Expansion of Connie's provider directory services to include community-based organizations and social service agencies would provide a technical backbone to support whole-person care and could benefit other organizations as the definitive source of truth for provider data, although this may require legislating the use of a common credentialing solution to create the value of clean provider directory data.
- Connie can be a conduit for other efficiencies as well, such as providing a public health gateway to the Department of Public Health priority systems (i.e., CTWiz, the state's immunization information system; birth and death records; surveillance systems and various tracking registries for conditions or infections, i.e., Zika, Lyme Disease, and lead poisoning).
- Community health records requiring integration of other data sources can be served by Connie. This tool would allow community healthcare providers to access aggregated patient records from multiple hospitals and medical labs throughout a community.
- Connie can serve public utility applications, including electronic case reporting and participation in disaster response. One example of the latter is the Patient Unified Lookup System for Emergencies ([PULSE](#)), which can support the information needs of an emergency field hospital when patients are remote from their normal provider systems. In a PULSE implementation, the HIE would participate with a Qualified Health Information Network (QHIN) to support this service.

- Connie is finalizing plans for partnering with an Advance Directive registry; this could be expanded to include medical proxies, power-of-attorney forms, and Medical Orders for Life Sustaining Treatment (MOLST) forms.

## Progress

The primary responsibility of Connie’s financial sustainability lies with its management and its Board of Directors. The board approved a sustainability plan which anticipated about 15% of Connie’s operational expenses for FFY 2023 – 2025 to come from participation fees which may be set by the HITO under the authority of CGS 17b-59g(e). In February 2022, HITAC acted at the request of the HITO to establish a *Health Information Exchange Sustainability Support Workgroup (HIE-SSW)*, in accordance with Focus Area 1 of the Statewide Health IT Plan. The workgroup charter was approved by the HITAC with an understanding by Council members that the financial sustainability of Connie is a matter of importance to everyone in the state. The stated purpose of the workgroup was to review, consider, and provide recommendations to the Council and the HITO on the feasibility of participation fees for the 2023 federal fiscal year.,

The workgroup was initially envisioned as having a limited scope, singularly focused on the potential for the HITO to set participation fees for users of Connie’s HIE services. Prior to making membership appointments the HITO met with several stakeholders including those that were being considered for the workgroup. Upon careful consideration the HITO opted to postpone participation fees for FFY 2023. This decision was made to give Connie more time to increase the number of connected provider organizations and expand the number of supported HIE use cases, so the value of Connie participation could be more accurately measured as part of the sustainability support review. Once the timing to relaunch the workgroup has been determined, the HITAC’s Co-Chairs will make appointments of individuals to serve on the HIE-SSW, representing the domains in Table 3, below.

Table 2 Representative Membership of a HIE-Sustainability Support Workgroup

Representation Specified for the HIE Sustainability Support Workgroup	
<b>Independent practice providers</b> <ul style="list-style-type: none"> <li>▪ Primary care</li> <li>▪ Specialty care</li> <li>▪ Supportive care (behavioral health, oral health)</li> </ul>	<b>Safety-net clinics</b> <ul style="list-style-type: none"> <li>▪ Federally Qualified Health Centers (FQHCs)</li> <li>▪ Rural Health Centers (RHCs)</li> <li>▪ Tribal health</li> </ul>
<b>Hospitals and health systems</b> <ul style="list-style-type: none"> <li>▪ Acute care hospitals</li> <li>▪ Community hospitals</li> </ul>	<b>Purchasers</b> <ul style="list-style-type: none"> <li>▪ Employers</li> <li>▪ Taft-Hartley plans/labor unions</li> </ul>
<b>Health Plans (payors)</b>	<b>Department of Public Health</b>
<b>Clinical/reference labs</b>	<b>Others, at the Co-Chairs’ discretion</b>
<b>Pharmacies</b>	<b>Department of Social Services</b>

## IMPLEMENTATION PRIORITY #5: IMPLEMENT SYSTEMS TO ADDRESS HEALTH EQUITY AND SOCIAL NEEDS

### Background

Connecticut will explore opportunities to provide community-based organizations (CBOs) with resources to acquire, implement, and train staff to use IT systems. In addition to expansion of referral management platforms, it is the intent in the Statewide Health IT Plan for exploration of the use of Connie as a centralized community information exchange (CIE) to capture longitudinal social risk data and to coordinate care and services across communities. The state will build on the extensive work done to develop the framework for [Health Enhancement Communities](#) (HEC) and, as mentioned above, is in the process of standardizing the collection of Race Ethnicity and Language (REL) data in coordination with the [Commission on Racial Equity in Public Health](#) to ensure that standards for the collection and storage of REL data are incorporated with other initiatives.

### Progress

In addition to developing the reporting standards and implementation guidelines for REL data across health and human service agencies, staff from OPM, DSS, and OHS are participating in a learning community to advance equity in data integration. As mandated by Public Act 21-35, OHS developed and promulgated Race, Ethnicity and Language (REL) Data Collection Standards and an Implementation Guide. OHS is convening meetings of state agencies to facilitate compliance with Public Act 21-35; participating in convenings with healthcare providers who must comply with the REL Standard; and is working with Connie on REL Standard implementation and the inclusion of disability status to be collected as part of the mandate. OHS successfully applied for \$1.15 million dollars as part of the American Rescue Plan Act (ARPA). The ARPA funds will be used to create a Health Equity Dashboard and upgrade four OHS systems (APCD, Inpatient, Outpatient Surgical, and Emergency Room Patient Databases), and select Department of Social Services (DSS) systems. With the support of Onpoint Health Data, OHS has updated the APCD Data Submission Guide to enable collection of REL data and is in the process of developing the implementation plan and implementing the changes in the remaining four databases.

## IMPLEMENTATION PRIORITY #6: PROTECT INDIVIDUALS' HEALTH INFORMATION PRIVACY

### Background

Protecting individuals' rights to privacy of their health data is a high priority for Connecticut lawmakers who in 2022 enacted expansive [consumer protection legislation](#) for online data privacy that includes a [task force](#) to study "Information sharing among health care providers and social care providers and

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make recommendations to eliminate health disparities and inequities across sectors, as described in subsection (a) of section 19a-133b of the general statutes”.

Health data privacy is also a growing and legitimate [concern of Americans](#), with multiple [examples](#) of healthcare organizations allowing individuals’ protected health information (PHI) to be shared, used, and even [sold](#) in some cases, without knowledge or consent of their patients. It is critical for the ongoing trust of Connecticut residents and [visitors receiving healthcare services](#) in Connecticut to be established and maintained through strong privacy practices to ensure that individuals’ preferences for how their health data is shared is respected, and that every individual’s PHI is kept secure, whether data is “at rest” (stored within a technology solution) or “in transit” (moving or allowing access of data between systems). Providing individuals with ways to exercise control around the use of PHI with easy ways to provide, deny, and revoke consent will be one of the most important activities the state, Connie, and many other organizations participating in data exchange can undertake. Consistent with HIPAA and other state and federal laws, Connie has implemented an opt-out consent model that allows patients to proactively opt out of data sharing to and through Connie. Taking additional steps in person-focused ways will build trust and buy-in for participation in Connie’s HIE services, as well as in the national networks for health data exchange.

Some states have sought funding through a Medicaid Advance Planning Document (APD) for the procurement of consent management software solutions to offer more assurance to individuals with sensitive health conditions and/or with data indicating treatment for a diagnosis indicating specially protected information (SPI) in their medical record, as well as provide additional assurance and legal protections to healthcare and social service providers, and government agencies, who need to confirm a valid consent for data sharing is in place, prior to sending or accessing SPI from EHRs, lab systems, care coordination platforms, and through HIE entities like Connie.

## Progress

Connie for its part has been working to develop a patient-centered communication outreach plan, with a goal of educating patients about what Connie is, the benefits of Connie, the choices that patients have, and ultimately building patients’ trust and understanding of the HIE. A communications firm has been contracted by Connie to help support this work.

Connie’s Board of Directors has established a Privacy, Confidentiality and Security Committee with the following duties:

1. To serve as a resource to the Connie organization for policies, procedures, and national standards-based best practices and recommend policies for data security, data use, and data sharing.
2. To serve as a guide to Connie as it strives to achieve ongoing compliance with both internal and external HIPAA and security audits.
3. To serve as a sounding board and offer guidance on any security-related incidents that occur within Connie, to include its business associates.

4. To serve as a guide in reviewing Connie’s cyber risks, including methods for identifying, assessing, and mitigating those risks.
5. To ensure that organizational policies and practices with respect to confidentiality, security and release of information are consistent with regulations and laws.

The Committee is comprised of nine members with diverse roles and perspectives, including privacy and security officers, legal counsel, IT executives, compliance officers, and a consumer advocate. The Committee officially kicked off its first meeting in December of 2022.

## SECTION 2: ESTABLISHMENT OF DATA STANDARDS

### Background

Connecticut General Statute 17b-59a distributes responsibilities for establishing electronic data standards for health information exchange among the OHS Executive Director, the DSS Commissioner, and the Health Information Technology Advisory Council (see Appendix D). While the DSS Commissioner has primary responsibility (in consultation with the OHS Executive Director) for the development of standards across state agencies, the OHS Executive Director (in consultation with the DSS Commissioner and HITAC) has primary responsibility for developing standards for health information exchange for use by healthcare providers and institutions.

The OHS Executive Director also has primary responsibility for the Health IT Plan, which is intended to enhance interoperability to support optimal health outcomes, supported by electronic data standards. OHS and DSS both recognize Connie’s statutory charge as statewide HIE, as well as the authority and fiduciary responsibility of DSS as the Single State Agency administering the Medicaid program.

While Connecticut has set statutory requirements to develop electronic data standards, the federal government has been working for the past eight years with standards development organizations (SDOs) to create guidance and develop regulations to improve the interoperability of health IT systems and the usability of data collected in those systems. [Section 4003 of the 21st Century Cures Act](#) spells out the federal regulations that aim to improve the interoperability of health information technology systems and that set penalties for blocking electronic data access by individuals to their own health records, or intentionally blocking electronic data exchange except with defined exceptions. The Act defines “interoperability” as health information technology that enables or allows:

- A. “the secure exchange of electronic health information with, and use of electronic health information from, other health information technology without special effort on the part of the user; “

- B. “complete access, exchange, and use of all electronically accessible health information for authorized use under applicable State or Federal law;” and
- C. “does not constitute information blocking as defined in [section 3022\(a\)](#).”

The Office of the National Coordinator for Health Information Technology (ONC) publishes the [Interoperability Standards Advisory](#) (ISA) as a way of recognizing interoperability standards and implementation specifications for industry use to fulfill specific clinical health IT interoperability needs. The ISA is issued annually, but because standards are frequently being added or changed, the website version of the ISA is regularly updated and is always considered the current version by the ONC.

The 21<sup>st</sup> Century Cures Act introduced the [USCDI](#), the United States Core Data for Interoperability. Health IT developers will use the USCDI as a standard for defining data elements within their systems. Following such a standard approach will support the interoperable use of exchanged data.

[Connecticut Public Act 21-35](#), which became law in 2021, requires providers “capable of connecting to and participating in Statewide Health Information Exchange” to collect the demographic data of race, ethnicity, and language (REL). OHS has made significant progress in this area as described in detail in Section One of this report.

## SECTION 3: STATEWIDE HEALTH INFORMATION EXCHANGE

### Background

Through [Connecticut General Statute Sec. 17b-59d](#) Connecticut Health Alliance (dba Connie) was designated as Connecticut’s Statewide Health Information Exchange to a) empower consumers to make effective health care decisions, b) promote patient-centered care, c) improve the quality, safety and value of health care, d) reduce waste and duplication of services, e) support clinical decision-making, f) keep confidential health information secure and g) make progress toward the state's public health goals.

Connie has been assigned eleven aims in the enabling legislation. Those are:

- (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 Statewide Health Information Exchange.

**Connie's organizational mission** is to enhance the health and well-being of Connecticut residents through the provision of health information technology services. These services empower consumers to make effective healthcare decisions and promote patient-centered care. They also improve the quality, safety, and value of healthcare, while reducing the waste and duplication of services. Connie will support clinical decision-making, keep patient medical health information confidential and secure and advance the state's public health goals.

**Connie's organizational vision** is to serve as a statewide advocate, leader, and catalyst for the adoption of health information technology and health information exchange services, which bring tangible, meaningful, and sustainable value to stakeholders across Connecticut.

Connie services are designed to enable providers and physicians to:

- Better share clinical information across all healthcare settings
- Assist in care coordination
- Reduce preventable costs associated with readmissions, duplicative testing, and errors
- Support public health reporting, research, and population health analytics
- Adhere to and promote standards and interoperability
- Provide patients with access to their own health information

Connie's role in facilitating provider connections includes knowing who needs to be connected, ensuring the resources are available to communicate about connecting, troubleshooting EHR vendor issues for providers as they onboard, and providing alternatives to those provider groups that do not have an EHR system capable of connecting. In those cases, Connie sets up a Direct address for

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messaging. In other words, Connie provides the tools and services to allow providers to do their best work and tries to meet every organization where they are, not letting technology be a barrier to information exchange, and empowering patients and providers.

At the close of 2022, Connie has executed data sharing agreements with approximately 50% of Connecticut's ambulatory providers, with 80% of those actively sharing data. Over 350 unique data feeds are coming into Connie's data infrastructure, and more than 700 users have been provisioned with appropriate data access. As of December 2022, Connie has received medical data for approximately 4M unique patients. All but one hospital have signed data use agreement, with the remaining hospital in legal review. Seventy-four percent of the hospitals (29 out of 39 are contributing data in some form to Connie). Connie has taken a "crawl, walk, run" approach to onboarding provider groups and when multiple provider organizations are using the same cloud hosted EHR solution, such as athenahealth, Connie has worked to set up a hub connection that links all athenahealth practices to Connie through a single connection. Connie will be working closely with OHS and DMHAS as engagement activities with behavioral health providers are held in coming months, in order to provide information and technology options to meet the unique needs of this critical sector of healthcare providers.

Connie has been envisioned as a [health data utility](#), defined as a government-designated, non-profit organization operating with the following conditions:

- State policy levers, including incentives and/or mandates;
- Broad stakeholder participation, connectivity, exchange, and community-level engagement;
- Mature Medicaid and public health use cases;
- Multistakeholder corporate and data/network governance;
- High standards for data privacy and security

Connie's biggest challenges going into 2023 are the need to determine its pathways to financial sustainability and to continue its onboarding efforts to enroll every provider with an EHR capable of connecting. They intend to work closely with OHS and DSS to justify an increase in Connecticut's federal match rate to CMS (currently 40%, to the state's 60%), and will be supporting the HIE-Sustainability Support Workgroup, chartered by the HITAC, with data analysis and documentation for the Workgroup's exploration of funding alternatives. Connie's executive team stands ready to provide CGA members with more information at any time and encourages a serious look by Connecticut's elected officials at the need to consider Connie as a similar type of public utility as the state's power grid for electricity.

## **Connie Consumer Engagement Activities**

The Connie team is working with the public relations and marketing firm, CommunicateHealth (CH) to develop a patient-centered communication outreach program with the goal of educating patients about what Connie is, the benefits of Connie, the choices patients have, and to cultivate patient trust.

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CH has been conducting an environmental scan of communication materials from other HIEs and published literature about other HIEs. The scan will be informing focus group discussions with patients and in-depth interviews with healthcare providers, staff, and other stakeholders, as well as revealing important considerations for the communications plan. The objectives of the environmental scan are to:

- Explore the drivers for meaningful patient engagement
  - Perceived benefits, such as increased quality of care, more convenience, reduced health care costs
  - Trust, resulting from factors like familiarity with participating healthcare organizations and transparency about privacy policies
  - Patient-provider relationships, including the quality of communication, interactions, and patient experience
  
- Gather data on patient preferences and interests
  - Provision of disclosures about the types of data that are collected and shared, auditing who has accessed an individual's data, and understanding when and with whom data is shared
  - Having the option to give permissions for one's health information to be shared on a temporary and need-to-know basis- that is, their information is not shared unless it is an allowed HIPAA disclosure needed for the delivery, authorization, coordination, billing, and payment for/of their care
  - The ability to remove sensitive and specially protected health information from their records (e.g., HIV status, substance use)
  - Understanding the terms of their consent, and HIE security measures, procedures for sharing data, and privacy terms
  
- Gain better understanding on patient concerns about the HIE
  - Concerns about HIE technology itself (e.g., technical challenges related to the accessing of their data through HIE, or based on a preference for face-to-face interactions with providers)
  - Concerns about misuse of their information (e.g., concerns about fraud or discrimination)
  
- Develop key messages for explaining the benefits and risks of enrolling in an HIE
  - Strategies and best practices HIEs have used in their patient communications
  - What types of communications from HIEs have influenced patient engagement, and in what ways
  - Patient preferences, needs, concerns, and challenges related to accessing HIEs and patient portals, and improved understanding of their own health and healthcare

## **Connie Use Cases in Production**

- **Empanelment Use Case:** Serves as one of two foundational use case for promoting care coordination by creating linkages between care teams and their patients. It enables organizations to send files containing patient information and health provider data in order to establish an active care relationship between the patient and the provider. Once this patient-provider attribution is made, it can be used to promote better transitions of care and care coordination through the Care Coordination use case. The Empanelment Use Case is essential to the master provider registry, master person index (MPI), and person-provider relationship service, which drive matching processes in a health information network.
- **Connie Portal:** A secure HIPAA-compliant stand-alone website to provide authorized participating organizations with the ability to review clinical data about a patient at the point of care; to search for additional members of the patient’s care team to help coordinate care; and to review the patient’s NarxCare Report via integration to Connecticut’s Prescription Monitoring and Reporting System (CPMRS), as required by law.
- **Clinical Data Use Case:** The Clinical Data Use Case serves as the second foundational use case for Connie. It enables participating organizations to send clinical data for improving care and transitions of care. Organizations send and receive clinical information such as patient care summaries, labs, or ADT messages to improve patient and provider encounters at the point of care, facilitate care coordination efforts, and result in better outcomes for patients, providers, and organizations alike.
- **Prescription Monitoring Program Access:** Connie has rolled out access to the state’s [CPMRS](#) through an integration with the Department of Consumer Protection’s gateway product. Access to the CPMRS enables providers to quickly look up a patient’s history of prescribed scheduled drugs. This information helps providers assess the risk of substance use disorders and doctor shopping, and it offers the potential to intervene with high-risk patients. Alignment between the state designated HIE and prescription monitoring programs (PMP) is a recognized best practice.
- **Provider Directory:** This service allows healthcare staff to look up a provider in Connecticut to enable referrals and improve transitions of care for their patients. It also enables users to search for a specific provider and find detailed and accurate information on that provider, including facility locations, contact information, and specialties. Conversely, searches can be based on desired qualifications such as a specific specialty of care. The Connie Master Provider Directory would serve as a source of truth for Connecticut provider information across numerous, previously disparate systems, including information on state-specific identifiers to support Medicaid and other programs an attribution service linking organizations/providers to patients/client and provide the foundational backbone for value-based payment models and whole-person care coordination and would serve as the underpinnings of ADT notification services.

- **InContext App:** Embed a SMART-on-FHIR app to enable users of certain electronic health records (EHRs) to securely access clinical data about their patients in the context of their workflow. SMART is the acronym for Substitutable Medical Applications and Reusable Technologies, a standards-based, interoperable apps platform for EHRs.
- **Best Possible Medication History:** BPMH is a consolidated medication history created using a systematic process of gathering medication information from multiple sources, deduplicating and standardizing the data, and displaying it in a single resource to assist healthcare providers with patient care.
- **Image Share:** Image Share provides Connie users access to patient images in full diagnostic quality at point of care. Images and reports are available directly in the Connie portal and InContext app in real time, enhancing both speed and quality of care. There are three functional elements in the tool: report-level viewing, imaging worklist, and transfer to PACS. Report-level views allow a provider to view an image when reviewing a patient's corresponding Radiology or Cardiology report. The imaging worklist allows a provider to compare images for one patient from all organizations that contribute images to Connie. While in the worklist the transfer to PACS functionality allows users with added permissions to download external images from the imaging worklist to their local PACS. Images taken within the last 90 days are made available to all authorized Connie users within seconds of collection, while deeper archives of images older than 90 days can also be queried and delivered on demand.
- **eReferral:** Provider to Homecare (behavioral health, home nursing, caretaker and companion services). Piloting with organizations currently sending or receiving faxed referrals.

## Connie Use Cases in DDI (Design, Develop, Implement)

- **Connie Patient Access:** Consistent with its mission to empower consumers and to meet one of its mandated goals of providing real-time, secure access to data, Connie is developing an Application Programming Interface (API) based solution with a 3<sup>rd</sup> party vendor to allow patients to access their data using their preferred tool or platform. Using applications such as Apple Health or CommonHealth, consumers can securely access their data while using familiar tools. For consumers preferring a web-based solution, Connie will be exploring a solution that will validate users and allow them to view and download their data. Patient ID validation; App registration gateway.
- **Provider-Mediated Affirmative Consent:** Enabling 42 CFR Part 2 Program providers who are able to filter SUD data to facilitate affirmative consent for data to be shared through Connie.

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## Connie Use Cases in Planning

- **Dental Records:** Dental health information is an essential part of overall patient information and can inform other healthcare diagnosis and treatment. Conversely, health information related to acute and chronic conditions can inform dental treatment. Medication information is an essential part of the information to be shared. Currently, the Connie team is investigating dental data formats and standards and determining meaningful data for display for dental and other health care providers.
- **Advance Directives:** Advance Directives (AD) use case planning includes research on whether Connie's technology will be able to receive continuity of care documents (CCDs) with electronic flags indicating an advance directive is available for the individual, and if so, whether the advance directive flags in CCDs could be parsed accurately. The Connie team is also researching other tools for making advance directives discoverable to emergency responders and hospital emergency department providers to understand whether this is a gap in data availability that Connie could help to close.
- **Durable Medical Equipment:** Planning for the electronic submission of prescription orders for Durable Medical Equipment (DME). Previously a DSS requirement for such electronic prescriptions made use of Direct Secure Messaging. This functionality can now be delivered through the HIE with associated improvements in efficiency and workflows.
- **Quality Measurement:** Clinical data and patient-generated information can significantly enhance the measurement of healthcare quality across provider populations. Clinical information available through an HIE can be used to enhance claims data to better identify performance and gaps in care. A statewide electronic system for clinical quality measurement will enable providers and encourage payers to participate in value-based payment models more effectively. Measures that monitor care delivery and health outcomes must securely aggregate data from multiple data sources and organizations at multiple levels, and include risk factors and exposures, and impacts to individual health.
- **Social Determinants of Health (SDOH) Data/Referrals Integrations:** Planning for the implementation and operation of a service to integrate SDOH data and to support SDOH-related referrals. Social Determinants are now widely accepted as having significant influence on an individual's overall health and on the probability of a desired health outcome when treatment is needed. SDOH data is fragmented across numerous social service agencies and community-based organizations and is not normalized or in formats common to healthcare. Capturing this data and making it available in conjunction with other clinical health data will result in more informed treatment and care coordination.

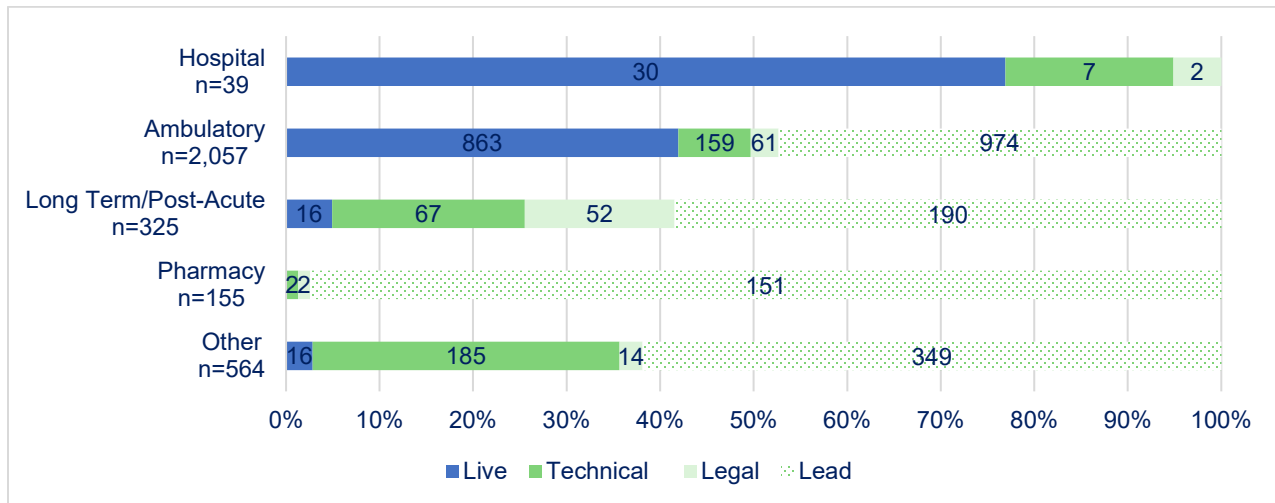
- **Emergent Imaging:** Working with the State of CT Stroke Advisory Council (a.k.a. SOC SAC) to develop an onboarding plan, with Q1-2023 connectivity planned to newly create a statewide stroke registry.

## Connie 2023 Goals and Future Plans

Connie has several partnership projects underway with state agencies, including:

- DSS Home and Community-Based Services (HCBS) ARPA Program
  - ✓ DSS has signed a data sharing agreement with Connie
  - ✓ A 3-year initiative is planned to develop tools for HCBS providers
- Department of Correction
  - ✓ DOC has signed a data sharing agreement with Connie
  - ✓ Work is underway to understand inmate’s medical history to develop plan of care during incarceration and share data with providers upon release
- Office of the Chief Medical Examiner
  - ✓ OCME has signed a data sharing agreement with Connie
  - ✓ Connie will support death investigations with clinical data
- Department of Public Health
  - ✓ Data feeds from the DPH Lab and with the Emergency Services Department

## Onboarding Progress by Provider Organization (2022)



### Onboarding Stages Defined

Live	Organization is providing one or more data feeds to Connie
Technical	Organization is working on technical integration to Connie
Legal	Organization is reviewing legal agreements
Lead	Remaining CT licensed health care provider organizations mandated to connect to Connie that have not yet started the legal step

## Connie By the Numbers (as of December 31, 2022)

Unique patients (provider empanelment data)	3.975 M
Number of patients who have opted out of Connie	1,851
Number of organizations that have signed data sharing agreements	1,365
Number of provider user accounts	696
Data feed connections/types*	365
<ul style="list-style-type: none"> <li>▪ Admit/Discharge/Transfer (ADT) messages (hospital encounters)</li> <li>▪ Continuity of Care Documents (CCDs – Summary of a patient's clinical information in electronic form)</li> <li>▪ Lab results</li> </ul>	9.4M monthly 1.4M monthly 3.7M monthly

\*Data Feed = A data feed is a way of sending structured, timely data from one electronic system to another. Typically, that structured data represents one type of clinical data such as lab results or visit information. Most of the hospitals that are connecting to Connie have at least six data feeds providing data to Connie. Smaller organizations, like physician offices, will generally have two data feeds coming into Connie.

## IMPLEMENTATION ADVANCED PLANNING DOCUMENT UPDATE (IAPD-U) OPERATIONAL ADVANCE PLANNING DOCUMENT (OAPD)

### Medicaid Federal Funding Requests to Support HIE Services

The most recent IAPD-U (Update) was submitted in June 2022 for the timeframe from October 1, 2022, through September 30, 2024. Additional updates are permitted by CMS in the interim, if needed. As a newly forming HIE, transactional data is not yet available. As a proxy for HIE utilization by payer, DSS evaluated the per capita number of medical transactions (paid medical claims) in Connecticut by insurance coverage, calculated with data from Connecticut's All-Payer Claims Database (APCD). DSS proposed a cost allocation methodology based on the anticipated percentage of HIE transactions attributable to the Connecticut Medicaid population. CMS approved this methodology on February 23, 2022. Connecticut proposed to retain the same cost allocation percentage at 40% for the IAPD and OAPD (now approved) for federal fiscal years (FFY) 2023 and 2024.

DSS personnel support the oversight of CMS-funded HIE activities through the Medical Operation's Health Information Technology Unit. DSS created an HIE Funding Oversight Committee to provide DSS governance over Medicaid funds provided to OHS for the statewide HIE and to ensure that Medicaid needs are met. Several new use case services are being planned in FFY23 and likely will

go into DDI in FFY24. The need for certification will be determined during planning and any needed outcomes and metrics will be proposed in the next IAPD-U.

DSS costs were approved at 90/10 for DDI activities and are 100% attributable to Medicaid. To ensure that Medicaid pays only its appropriate share, DSS is cost allocating HIE activities. OHS and HIE costs were approved at 90/10 for DDI activities and cost allocated at 40% attributable to Medicaid.

Table 3: Connie Use Case Roadmap for Medicaid Cost-Allocated Funding

Implementation Phase/FFY	Use Case Service	Supporting Function
1 /2021	Empanelment and Alerts	MPI
2 /2022	Portals, Provider Directory, eReferrals	Clinical data, PMP Access, BPMH, Image Exchange
3/2023	---	AHCD, Immunizations, Provider Mediated eConsent, Stroke Registry, Dental Health Records, Patient Data Access
4/2024	Electronic Case Reporting, Quality Measurement, DME Order Tracking	Patient Mediated eConsent, eConsult, SDOH referrals

Table 4: Approved IAPD Budget for Medicaid Share of HIE Funding

DDI	Total Costs	Costs Allocated to Medicaid	90% Federal Share	10% State Share	50% Federal Share	50% State Share	Total Federal Share	State Share Total
FFY 23	\$ 9,658,970	\$ 5,703,945	\$ 4,608,436	\$ 512,048	\$ 291,730	\$ 291,730	\$ 4,900,166	\$ 803,779
FFY 24	\$ 9,412,258	\$ 5,573,414	\$ 4,441,164	\$ 493,463	\$ 319,393	\$ 319,393	\$ 4,760,558	\$ 812,856
<b>Grand Total:</b>	<b>\$ 19,071,228</b>	<b>\$ 11,277,360</b>	<b>\$ 9,049,600</b>	<b>\$ 1,005,511</b>	<b>\$ 611,123</b>	<b>\$ 611,123</b>	<b>\$ 9,660,724</b>	<b>\$ 1,616,635</b>

Figure 3: Certified HIE Functionality FFY 2023

FFY23 Costs for Certified Functionality	Cost
Core Infrastructure (ENS Empanelment/Delivery)	\$ 486,650
Core Infrastructure (EMPI)	\$ 265,170
Connie Personnel - Eligible for Enhanced Funding	\$ 128,248
Connie Personnel - Not Eligible for Enhanced Funding	\$ 127,393
Connie Administrative Costs	\$ 167,940
<b>Total Operational Costs for Certified Functionality</b>	<b>\$ 1,175,401</b>

Three use cases receiving DDI funding during FFY22 will be operational in FFY23 but have not yet undergone outcomes-based certification. Connecticut will receive 50/50 FFP, cost allocated, until certification is obtained. When submitting proof for certification, DSS can request the effective date be retroactive to the implementation date, allowing the state to retroactively receive 75/25 FFP (cost allocated) back to the implementation date.

**FFY23 Costs for Operational Functionality Not Yet Certified**

(Use Cases were in DDI in FFY22)

<b>Connie Connect Portal Service (Use Cases 1 and 2)</b>	<b>Cost</b>
Connie Personnel - Eligible for Enhanced Funding	\$146,570
Connie Personnel - Eligible for Administrative Funding	\$145,591
Connie Administrative Costs	\$195,929
Core Infrastructure (CRISP)	\$372,500
<b>Total Connie Connect Portal</b>	<b>\$860,590</b>

<b>eReferral Service (Use Case 3)</b>	<b>Cost</b>
Connie Personnel - Eligible for Enhanced Funding	\$54,964
Connie Personnel - Eligible for Administrative Funding	\$54,597
Connie Administrative Costs	\$48,982
Core Infrastructure (CRISP)	\$80,655
<b>Total eReferral Service</b>	<b>\$239,198</b>

<b>Provider Directory Service (Use Case 4)</b>	<b>Cost</b>
Connie Personnel - Eligible for Enhanced Funding	\$36,642
Connie Personnel - Eligible for Administrative Funding	\$36,398
Connie Administrative Costs	\$48,982
Core Infrastructure (CRISP)	\$110,000
<b>Total Provider Directory Service</b>	<b>\$232,022</b>

<b>TOTAL FFY 23 Costs for Operational Functionality that is not yet certified</b>	<b>\$1,331,810</b>
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## SECTION 4: RECOMMENDATIONS FOR POLICY, REGULATORY OR LEGISLATIVE CHANGES

In accordance with Connecticut General Statutes §17b-59c, OHS plans to undertake regulations and policies and procedures for the health information exchange.

## SECTION 5: OTHER INITIATIVES PROMOTING HEALTH IT

### Office of Health Strategy Technology Initiatives

OHS leads or supports numerous initiatives to improve healthcare quality and efficiency, drive cost savings, and bring transparency around healthcare costs. Major efforts are underway relating to the policy priorities below; over time, each of these initiatives will be directly impacted by improvements to Connecticut's health IT infrastructure and to the availability of data.

### DSS & OHS Joint Steering Committee

On December 2, 2019, the DSS Commissioner and OHS Executive Director established the Department of Social Services (DSS) & Office of Health Strategy (OHS) Joint Steering Committee. The purpose of the Joint Steering Committee is to provide recommendations on conceptual and strategic matters, as well as to make decisions on tactical and operational matters as defined through the DSS-OHS Memorandum of Agreement. DSS and OHS agree that a successful collaboration recognizes both the OHS statutory charge for overseeing the statewide HIE and DSS' authority and fiduciary responsibility as the Single State Medicaid Agency for administering federal funding from the Centers for Medicare and Medicaid Services (CMS) to support the HIE. The agreement describes the joint vision of OHS and DSS working together and sets forth its understanding of the steps and processes that will be used for the mutual benefit of both agencies, Connie, as the state designated HIE, and other Connecticut stakeholders.

Current collaborative activities include the development of CMS funding proposals for HIE implementation and operations. In addition, DSS and OHS are working together to obtain CMS certification of HIE functionalities as they become operational.

### Healthcare Benchmark Initiative Data Analytics Workgroup

The Healthcare Benchmark Initiative Data Analytics Workgroup's charge includes designing and reviewing standard cost drivers, cost driver reports, and ad hoc analyses using available APCD data, identifying opportunities to reduce spending growth, and offering recommendations for areas of focus to the OHS Healthcare Benchmark Initiative Steering Committee on opportunities for

reducing cost growth in the state. The Data Analytics workgroup members include designees from DSS and the Office of the State Comptroller and representatives of healthcare stakeholders such as healthcare providers, insurance carriers, health equity advocate, health economists or actuarial experts and data analytics subject matter experts. The Workgroup's advice follows guidance established by the Steering Committee's endorsed Data Use Strategy adopted and updated by the State. The Workgroup provides advice on:

- Implementing the Data Use Strategy, including design and review of standard and ad hoc reports
- Benchmarking of Connecticut spending to other state benchmarks
- Identifying contributors to high spending, spending variation and spending growth
- Identifying opportunities for cost growth mitigation strategies
- Using analytic findings in an illustrative manner to make a compelling case to support policy change to ensure equitable, high-quality healthcare and improved population health
- Offering contextual insights when interpreting analytic findings

## **Connecticut Office of Health Strategy Data Compendium**

The Data Compendium is a compilation of a current profile of key databases maintained by OHS and provides a current profile of key databases maintained by staff of OHS. For data sources, information includes: a brief overview of the data source, website, link and data fields related to the database.

Information on public availability and access to the data are provided on the cover page of a Microsoft Excel workbook which has tabs for:

- All Payer Claims Data (APCD) and data dictionary
- Certificate of Need (CON) database and data dictionary
- Certificate of Need Notifications
- Consumer Engagement
- Hospital Reporting System (HRS) and data dictionary
- Acute care and specialty hospital Audited Financial Statements (AFS)
- State Health Care Facilities and Services Inventory and data dictionary
- Nonprofit Hospital IRS form 990 data
- Hospital Corporate Structure data
- Hospital Medicare Cost Reports
- Patient data and data dictionary from facilities, including:
  - ✓ Inpatient Discharge Database System (HIDDS)
  - ✓ Emergency Department Data
  - ✓ Surgery department and Outpatient Surgical Facility Data (OSC)
- Other Required Filings – required of a variety of health care organizations and provider types
- Hospital Uncompensated Care Policies and Procedures filings required by statute

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This document is available on the Internet at: <https://portal.ct.gov/OHS/Services/Data-and-Reports/To-Access-Data>

## ALL PAYER CLAIMS DATABASE (APCD)

### Background

Created in 2012 by Public Act 12-166, later codified as Connecticut General Statutes Section 19a-755a, the Connecticut All Payer Claims Database (APCD) was established as a program to receive, store, and analyze health insurance claims data. The Act requires health insurers to submit medical and pharmacy claims data, as well as information on providers and eligibility. Information derived from this data seeks to improve the health of Connecticut's residents through the collection and analysis of data and the promotion of research addressing safety, quality, transparency, access, and efficiency at all levels of health care delivery.

[Connecticut General Statutes Section 19a-755a](#) mandates OHS to oversee APCD planning, implementation, and administration. Collection and analyses of the APCD data supports health improvement and cost containment. Data is used for research addressing cost, safety, quality, transparency, access, equity and efficiency at all levels of health care delivery. Additionally, OHS utilizes claims data in the APCD to provide cost and quality of service data to consumers in Connecticut to inform consumer choices for economically sound and medically appropriate decisions, and according to their preferences and needs. In conformance by law APCD data is made available to state agencies, insurers, employers, health care providers, consumer of health care services or researcher for such purposes through a data release process for internal state data uses and external APCD data uses. The [OHS website for the APCD](#) makes information about the database, its charter, oversight, governance, and policies and procedures, available to the public.

OHS provides oversight and staffing support for several APCD workgroups and committees, including the APCD Advisory Group, the APCD Data Privacy and Security Subcommittee, the APCD Data Release Committee (DRC), and the APCD DRC Application Review Workgroup. The DRC is convened on the second Tuesday of each month to review and deliberate on each data release request application submitted. Decisions to release data are based on established policies. These can be viewed at the [APCD Data Release Committee's web page](#), along with the committee charter, meeting schedule, meeting materials, and instructions for qualifying entities on how to complete and submit a data request. Depending on the organization requesting APCD data and the proposed use the request is being made for, OHS releases data extracts from the APCD "to any state agency, insurer, employer, health care provider, consumer of health care services, researcher, or the Connecticut Health Insurance Exchange for the purpose of allowing such person or entity to review such data as it relates to health care utilization, costs or quality of health care services. Such disclosure shall be made in a manner to protect the confidentiality of health information, as defined

in 45 CFR 160.103, and other information, as required by state and federal law.” For entities outside the State of CT, OHS releases a deidentified data extract containing commercial data only.

Thirteen organizations representing commercial insurance carriers, pharmacy benefits management organizations, and government healthcare programs, submit data monthly to the APCD. Many of these payers have multiple benefit plans or insurance products and the threshold for commercial insurers is enrollment of 3,000 or more lives. Each quarter, new APCD data is released containing utilization and pricing information on commercial, Medicare, and Medicaid covered populations. Data types from these sources include medical and pharmacy claims, as well as eligibility, enrollment, and provider information. The APCD currently contains more than 950 million records.

Historical data is available for several years for analysis providing longitudinal insight and trends. Commercial insurance and Medicare claims data is available from January of 2012 through September 2022, and Medicaid data is available from January 2016 through September 2022.

The APCD currently contains more than 950 million records spanning data from 2012 through September 2022. Historical data availability enables longitudinal insight and trend analyses. Specifically, commercial insurance and Medicare eligibility and claims data is available from 2012 while Medicaid data is available from 2016.

<b>Payer Source</b>	<b>Claim Type</b>	<b>Years Available</b>
Commercial** - Fully Insured Claims - State Employees & Retirees - Medicare Advantage (Medical only)	Eligibility/Enrollment Medical Claims Pharmacy Claims	1/1/2012 – 9/30/2022
Medicaid	Eligibility/Enrollment Medical Claims Pharmacy Claims	1/1/2015 – 9/30/2022
Medicare	Eligibility/Enrollment Medical Claims Pharmacy Claims	1/1/2012 – 12/31/2019 1/1/2012 – 12/31/2018

\* Collection to begin in 2023

\*\*Anthem, Aetna, Cigna East, Cigna West, ConnectiCare, United Healthcare, HealthyCT, Harvard Pilgrim, Optum Health, Oxford, WellCare Health, eviCORE Healthcare, Express Scripts, Caremark

*Reporting threshold – 3,000 members*

## Progress

### Data Analysis

In 2022, OHS performed 32 data analyses utilizing APCD. These include:

1. Prescription drug cost and utilization data pursuant to Conn. Gen. Stat. § 19a-754b, An Act Concerning Prescription Drug Costs.
2. Support of Governor's Executive Order No. 5 to create healthcare cost growth and quality benchmarks and primary care spending targets.
3. Support of 17 Certificate of Need program decisions.
4. Rand 4.0 study for hospital price transparency to compare commercial with Medicare hospital prices and trends in individual states, and the nation.
5. Ad hoc analyses including a Workers' Compensation scope analysis.
6. Help determine federal funding for the operations of the HIE (Connie).
7. Assist Connie to identify out of state health care providers that provide services to CT residents.
8. Office of Fiscal Analysis to support legislation on breast cancer screening; and
9. OPM for COVID testing costs.

### APCD Data Extracts Provided

OHS released APCD data extracts and aggregations to support other Connecticut state agencies' analysis, projects and initiatives including to:

1. UConn School of Medicine – Suicide and Opioid prescribing and its consequences
2. Apperture, LLC – Medication adherence of CT persons diagnosed with three chronic disease conditions: asthma, diabetes, and cancer
3. Yale University School of Public Health – Study on HPV/Genital Warts
4. Federal Trade Commission – Connecticut bordering state hospital merger investigation (friendly federal subpoena to State)
5. Yale University – Study on population health total cost of care and care continuity enhancement (Refresh)
6. Yale University School of Public Health – Understanding Trends in Healthcare Use, Cost, and Outcomes for Populations with Chronic Conditions (New)

### OHS and State Initiated Projects Supported by APCD Data

1. Outpatient Rx drugs transparency mandate
2. Rand 4.0 employer-initiated study
3. Healthcare Cost and Quality Benchmarks & Primary Care Target Initiative (Data Use Strategy) – medical and pharmacy analysis
4. Healthcare service pricing and availability for Certificate of Need decision making

5. In, and out-of-network breast cancer screening utilization and cost for the commercially insured to support legislation
6. List of out of state healthcare providers serving Connecticut residents provided to Connie
7. Claims volume by product line to support Connie federal funding match analyses (26% CMS cost share increased to 40%)
8. Trauma activation fees (surprise billing) trends
9. Cost estimator – Phase 1 to be released soon
10. Pre-authorization legislative workgroup
11. APCD Snapshot – online dashboard of summary data available (e.g., data available, number of people insured from year to year, medical procedures performed, drugs prescribed, costs for health plans and consumers)
12. Legislatively mandated telehealth study (in progress, report due 1/31/2023)

### **Policy Development to Advance and Enhance APCD Value**

The APCD Advisory Group (APCD-AG) is a mandated subcommittee of the state’s Health Information Technology Advisory Council that supports OHS to administer the APCD. For 2022, the APCD Advisory Group achieved the following objectives:

- Review and approve the APCD Advisory Group Charter; August 11, 2022
- Establish a Denied and Dental Claims Workgroup to advise on data submission guide amendments
  - ✓ Workgroup authorized by Advisory Group May 12, 2022, final report and recommendations delivered to Advisory Group in August of 2022
- Develop stakeholder engagement campaign to encourage self-insured employers to submit to CT APCD
  - ✓ OHS and the Advisory Group are in the process of compiling information from other states and the national APCD Council on successful approaches to securing voluntary submission of claims data from self-funded employer health benefit plans
- Develop data use case recommendations
  - ✓ OHS and APCD Advisory Group are engaged in ongoing review of use cases and potential APCD data products for prioritization
- Review and approve updated APCD Policies and Procedures for data release
  - ✓ OHS, the DRC, and the Data Privacy and Security subcommittee have engaged legal assistance in the review of current policies and procedures for revision

### **Denied and Dental Claims Workgroup**

The APCD Advisory Group determined dental claims and denied claims data to be high-value data sets currently missing from the CT APCD. At the May 12, 2022 meeting, the APCD-AG authorized a workgroup, the APCD Data Submission Guide Workgroup (DSGW), to make recommendations for

collection of denied and dental claims. Specifically, the APCD-AG charged the Workgroup with making recommendations for modifying the Data Submission Guide (DSG) to facilitate collection of denied and dental claims data in alignment with industry and national standards. This activity included consulting and incorporating the National Association of Health Data Organization’s APCD Common Data Layout (CDL) where appropriate.

The charter for the All-Payer’s Claims Data Submission Guide Workgroup was ratified by the APCD Advisory Group on May 12, 2022. The workgroup convened for six (6) meetings between May and August of 2022. OHS produced a [report and recommendations](#) based on the work of the Data Submission Guide Workgroup and a draft was approved for submission to the APCD Advisory Group on August 4, 2022.

Name	Representation
Olga Armah	Chairperson, Office of Health Strategy Representative of the Office of Health Strategy
Bernie Inskeep	United Health Group Representative of a Health Insurance Company
Laurel Buchanan	UConn Health Representative of a Healthcare Expert from an Academic Institute
Sandra Czunas	Office of the State Comptroller Expert in Dental Claims and a Representative of a State Agency
Sheryl A. Turney	Anthem Blue Cross Blue Shield Member of the CT All Payer Claims Database Data Release Committee
Jesse Drummond	Technical Support OnPoint Health Data CT APCD Data Manager/Vendor
Robert Viens Serna	Technical Support -OnPoint Health Data CT APCD Data Manager/Vendor

Table 5: APCD Data Submission Guide Workgroup Members

With the support of OHS, the APCD Advisory Group approved the Data Submission Guide Workgroup report and approved the collection and integration of denied claims and dental claims for the APCD on August 11, 2022. Subsequent work commenced on revisions and amendments to the APCD Data Submission Guide enabling the submission and collection of dental claims and denied claims in alignment with industry and national standards. Submission of these additional claim types is being implemented and will begin in 2023.

**Updates to Data Release Committee Policies and Procedures for Data Release**

The APCD DRC approved its charter in October of 2022 and submitted it to the APCD Advisory Group for adoption at the November 2022 Advisory Group meeting. The charter was subsequently shared with the HITAC. The DRC’s purpose is to review and approve or deny applications for release of data when applications are submitted by entities who have a program, project, study or

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other need for APCD data. The DRC also supports OHS with the receipt, processing and review of data release applications.

OHS now has on staff a legal team to assist with review of APCD data release policies and procedures to ensure legislative intent is met, and that the APCD and any data extracts or analyses are beneficial to Connecticut consumers, the healthcare system and its providers, state government agencies, employers, and other payers, and other stakeholders with an interest in access to care, equity in healthcare, quality of care and service, better health and outcomes for residents of Connecticut, and sustainable healthcare costs. This work includes input from the Data Privacy and Security Subcommittee.

This work is ongoing. However, some important questions have been considered in informing needs for revisions to data release policies and procedures. For example, adequately addressing issues of racial equity and bias in research, study, and analysis performed by recipients of APCD data products has resulted in language revisions to the data release application as of December 2022. OHS and the DRC will consider potential impacts on Connecticut residents of the release of APCD data to requestor/applicant organizations, including disparate impact by race, ethnicity, language, sex, gender identity, disability status or other factors.

## APPENDIX A: HEALTH IT ADVISORY COUNCIL MEMBERS

	Appointment	Name & Appointment Date	Represents
1.	Statute	Sumit Sajjani 10/22/2021	Health Information Technology officer or designee
2.	Statute	Gui Woolston (designee) 7/11/2022	Commissioner of Social Services or designee
3.	Statute	Elizabeth Taylor (designee) 12/19/2019	Commissioner of Mental Health and Addiction Services or designee
4.	Statute	Nicole Taylor (designee) 11/18/2021	Commissioner of Children and Families or designee
5.	Statute	Sharonda Carlos (designee) 1/19/2021	Commissioner of Correction or designee
6.	Statute	Adelita Orefice (interim designee) 4/13/2022	Commissioner of Public Health or designee
7.	Statute	Joshua Scalora (designee) 8/17/2022	Commissioner of Developmental Services or designee
8.	Statute	Sandra Czunas (designee) 12/21/2017	State Comptroller or designee
9.	Statute	Mark Raymond	CIO or designee
10.	Statute	Rebekah McLearn (designee) 10/19/2022	CEO of the CT Health Insurance Exchange or designee
11.	Statute	Kelly Sinko Steuber 12/20/2021	An expert in state healthcare reform initiatives appointed by the Exec. Dir. of the Office of Health Strategy
12.	Statute	Vacant	CIO of UConn Health or designee
13.	Statute	Ted Doolittle	Healthcare Advocate or designee
14.	Governor	Vacant	Representative of a health system with more than one hospital
15.	Governor	David Fusco 3/9/2016	Representative of the health insurance industry
16.	Governor	Nicolangelo Scibelli 1/19/2016	Expert in health information technology
17.	Governor	Patricia Checko 1/19/2016	Healthcare consumer or consumer advocate
18.	Governor	Cassandra Murphy 3/2/2020	An employee or trustee of a plan established pursuant to subdivision (5) of subsection (c) of 29 USC 186
19.	President Pro Tempore of Senate	Robert Rioux 9/20/2016	Representative of a federally qualified health center
20.	President Pro Tempore of Senate	Vacant	Provider of Behavioral Health Services
21.	President Pro Tempore of Senate	Vacant	Representative of the Connecticut State Medical Society

22.	Speaker of the House of Representatives	Lisa Stump 11/22/2016	Technology expert who represents a hospital system
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## Health IT Advisory Council Members, continued

	Appointment by	Name   Appointment Date	Represents
23.	Speaker of the House of Representatives	Vacant	Provider of home healthcare services
24.	Speaker of the House of Representatives	Vacant	Healthcare consumer or healthcare consumer advocate
25.	Majority Leader of the Senate	Patrick Charmel 11/30/2015	Representative of an independent community hospital
26.	Majority Leader of the House of Representatives	Vacant	Physician who provides services in a multispecialty group and who is not employed by a hospital
27.	Minority Leader of the Senate	Joseph Quaranta, MD (Co-Chair) 7/22/2015	Primary Care Physician who provides services in a small independent practice
28.	Minority Leader of the House of Representatives	Alan D. Kaye, MD 8/24/2015	Expert in healthcare analytics and quality analysis
29.	President Pro Tempore of Senate	Dina Berlyn (designee)	President Pro Tempore of Senate or designee
30.	Speaker of the House of Representatives	Mark Gildea (designee) 9/8/2021	Speaker of the House of Representatives or designee
31.	Minority Leader of the Senate	Dr. Susan Israel (designee) 1/6/2021	Minority Leader of the Senate or designee
32.	Minority Leader of the House of Representatives	William Petit 5/13/2019	Minority Leader of the House of Representatives or designee
33.	Health IT Advisory Council Co-Chairs	Vacant	Representation at the discretion of the Co-Chairs
34.	Health IT Advisory Council Co-Chairs	Vacant	Representation at the discretion of the Co-Chairs
35.	Health IT Advisory Council Co-Chairs	Vacant	Representation at the discretion of the Co-Chairs
36.	Health IT Advisory Council Co-Chairs	Vacant	Representation at the discretion of the Co-Chairs

## APPENDIX B: HEALTH IT ADVISORY COUNCIL 2023 MEETING DATES AND TIMES

Health Information Technology Advisory Council meetings are held on the third (3<sup>rd</sup>) Thursday of the month. In accordance with Public Act 22-3, OHS intends to hold all meetings solely by means of electronic equipment (remotely).

**Meeting Location: Zoom Conference**  
Dial In: +1 646 876 9923 US (New York)  
Meeting ID: 842 7294 5585  
Passcode: 807322

Date (Thursday)	Time (EST)
January 19, 2023	1:00-3:00 pm
February 16, 2023	1:00-3:00 pm
March 16, 2023	1:00-3:00 pm
April 20, 2023	1:00-3:00 pm
May 18, 2023	1:00-3:00 pm
June 15, 2023	1:00-3:00 pm
July 20, 2023	1:00-3:00 pm
August 17, 2023	1:00-3:00 pm
September 21, 2023	1:00-3:00 pm
October 19, 2023	1:00-3:00 pm
November 16, 2023	1:00-3:00 pm
December 21, 2023	1:00-3:00 pm

Agendas, materials, and updated meeting information can be found on the Office of Health Strategy website: [HITAC Meeting Materials & Information](#)

Pursuant to Public Act 22-3, OHS will provide accommodations for members of the public who need access to electronic equipment. Please contact [OHS@ct.gov](mailto:OHS@ct.gov) no later than 24 hours in advance of the meeting to make a request.

## APPENDIX C: HHS INTERAGENCY WORKGROUP ON DATA SHARING & SERVICE COORDINATION SURVEY INSTRUMENT FOR AGENCIES

Are these data types being collected about individuals and families served by your agency? Please add additional data types that would be helpful but are not listed.

Types of data	Is the data currently collected by my agency <b>Yes/No</b>	If <b>Yes</b> , please name the IT system(s) the data is being captured in, and any other information about collecting the data you can provide	If <b>No</b> , place an <b>X</b> in the box if the data would be helpful
<b>Demographic information about individuals</b>			
Housing status/ history; How long at current address and at previous addresses			
E-Mail address			
Phone number(s)			
Contact information of close family member			
Race			
Ethnicity			
Language			
Please add other demographic data types that would be helpful, but are not currently collected by your agency			
<b>Clinical information about individuals</b>			
Primary care provider and/or health home			
Clinical care summary			
Problem list			
Chronic diseases			
Allergies			
Medications			
Medical images			
Toxic exposures (i.e., lead, smoke, drugs)			
History of serious injuries/illness			
Please list other clinical data types that would be helpful, but are not currently collected by your agency			

## HHS Interagency Workgroup Data Sharing & Service Coordination Survey Instrument for Agencies, continued

Types of data	Is the data currently collected by my agency <b>Yes/No</b>	If <b>Yes</b> , please name the IT system(s) the data is being captured in, and any other information about collecting the data you can provide	If <b>No</b> , place an <b>X</b> in the box if the data would be helpful
<b>Assessments</b>			
Health assessments			
Substance use assessments			
Social needs assessments (i.e., food and housing insecurity, transportation needs, education and training needs, childcare needs, eldercare needs, others)			
Trauma assessments			
Mental health, depression, and/or social isolation assessments			
Safety assessments (physical, emotional)			
Please list other types of assessments that would be helpful, but are not currently collected by your agency			
<b>Personal and family history data</b>			
Employment status and history			
Education status and history			
Family members' health status and histories			
Status and history of justice involvement (including child protective services)			
Status and history of homelessness			
Status and history of Medicaid benefits			
Status and history of supplemental nutrition benefits			
Status and history of financial assistance benefits			
Status and history of disability determination(s) and benefits			
History of self-harm			
Diagnosed learning disabilities or autism spectrum			
Self-identified attributed care team members			
Please list other data types that would be helpful that are not currently collected by your agency			

## APPENDIX D: REQUIREMENTS FOR ELECTRONIC HEALTH IT AND HIE STANDARDS

<p><b>DSS Commissioner with OHS Executive Director</b></p>	<p><b>CGS 17b-59a (3)(b)</b>          Develop uniform management information, statistical information, terminology for similar facilities, electronic health-information standards, and uniform regulations for the Departments of Developmental Services, Public Health, Correction, Children and Families, Veterans Affairs, and Mental Health and Addiction Services.</p>
<p><b>OHS Executive Director with DSS Commissioner and HITAC</b></p>	<p><b>CGS 17b-59a (3)(c)</b>          Establish electronic data standards to facilitate development of integrated electronic health-information systems for use by healthcare providers and institutions that receive state funding. Include provisions related to security, privacy, data content, structures and format, vocabulary, and transmission protocols.  <b>Include requirements to:</b></p> <ul style="list-style-type: none"> <li>• Be compatible with any national data standards to allow for interstate interoperability</li> <li>• Be compatible with the requirements for an electronic health-information system</li> <li>• Limit the use and dissemination of an individual’s Social Security number (SSN)</li> <li>• Permit the collection of health information in a standard electronic format</li> <li>• Require the encryption of any SSN</li> <li>• Require privacy standards no less stringent than those in the Health Insurance Portability and Accountability Act of 1996 (HIPAA)</li> <li>• Require that Protected Health Information (PHI) be secure</li> <li>• Require that access to PHI be traceable by an electronic audit trail</li> </ul>
<p><b>Statewide Health Information Technology Plan</b></p>	<p><b>CGS 17b-59a (3)(c)</b>          Include general standards and protocols for HIE, as well as national data standards to support secure data exchange to facilitate the development of a statewide, integrated electronic health-information system. Standards shall include provisions relating to security, privacy, content, structures and format, vocabulary, and transmission protocols.  <b>Include requirements to:</b></p> <ul style="list-style-type: none"> <li>• Be compatible with any national data standards to allow for interstate interoperability</li> <li>• Permit the collection of health information in a standard electronic format</li> <li>• Be compatible with the requirements for an electronic health-information systems</li> </ul>

## APPENDIX E: CGS MANDATING HIE CONNECTIONS FOR HOSPITALS AND AMBULATORY PROVIDERS WITH EHR TECHNOLOGY

### Sec. 17b-59e. Electronic health record systems. Connection to State-wide Health Information Exchange. (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 and clinical laboratory licensed under section 19a-30 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, (1) 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, and (2) each health care provider without an electronic health record system capable of connecting to, and participating in, the State-wide Health Information Exchange shall be capable of sending and receiving secure messages that comply with the Direct Project specifications published by the federal Office of the National Coordinator for Health Information Technology.

## APPENDIX F: PARTIAL LIST OF HEALTH INFORMATION TECHNOLOGY ACRONYMS

<b>ACO</b>	Accountable Care Organization	<b>IIS</b>	Immunization Information System
<b>APCD</b>	All-Payer Claims Database	<b>ISA</b>	Interoperability Standards Advisory
<b>ARRA</b>	American Recovery and Reinvestment Act	<b>ISO</b>	International Standards Organization
<b>BPMH</b>	Best Possible Medication History	<b>LDS</b>	Limited Data Set
<b>CBO</b>	Community Based Organization	<b>MES</b>	Medicaid Enterprise System
<b>CCIP</b>	Community and Clinical Integration Program	<b>MPI</b>	Master Person Index
<b>CIE</b>	Community Information Exchange	<b>MRPC</b>	Medication Reconciliation and Polypharmacy Committee
<b>CMMI</b>	Center for Medicare and Medicaid Innovations	<b>OHS</b>	Office of Health Strategy

<b>CMS</b>	Centers for Medicare and Medicaid Services	<b>OMB</b>	U.S. Office of Management and Budget
<b>CQM</b>	Clinical Quality Measure	<b>ONC</b>	Office of the National Coordinator for Health Information Technology
<b>CRISP</b>	Chesapeake Regional Information System for our Patients	<b>OPM</b>	Office of Policy and Management
<b>DGS</b>	Digital Government Services	<b>OSC</b>	Office of the State Comptroller
<b>DPH</b>	Department of Public Health	<b>P20 WIN</b>	Preschool Through Twenty Workforce Information Network
<b>DSS</b>	Department of Social Services	<b>PCMH</b>	Patient Centered Medical Home
<b>eCMS</b>	Electronic Consent Management System	<b>PCSC</b>	Patient Centered Services Collaborative
<b>eCQM</b>	Electronic Clinical Quality Measure	<b>PDMP</b>	Prescription Drug Monitoring Program
<b>EHR</b>	Electronic Health Record	<b>PHI</b>	Protected Health Information
<b>ERIC</b>	Equity Research and Innovation Center-Yale	<b>PSI</b>	Prevention Service Initiative
<b>FFP</b>	Federal Financial Participation	<b>R&amp;D</b>	Research and Development
<b>FFY</b>	Federal Fiscal Year	<b>REL</b>	Race Ethnicity and Language (REL)
<b>FQHC</b>	Federally Qualified Health Center	<b>RFA</b>	Request for Applications
<b>Health IT</b>	Health Information Technology	<b>SDLC</b>	Systems Development Life Cycle
<b>HEC</b>	Health Enhancement Communities	<b>SIM</b>	State Innovation Model
<b>HHS</b>	Health and Human Services	<b>SMHP</b>	State Medicaid Health IT Plan
<b>HIE</b>	Health Information Exchange	<b>SMMS</b>	Statewide Medication Management Services
<b>HIPAA</b>	Health Insurance Portability and Accountability Act of 1996	<b>TA</b>	Technical Assistance
<b>HITECH</b>	Health Information Technology for Economic and Clinical Health Act	<b>TEFCA</b>	Trusted Exchange Framework and Common Agreement
<b>HITO</b>	Health Information Technology Officer	<b>2Gen</b>	Two Generational Initiatives
<b>HITRUST</b>	Health Information Trust Alliance	<b>UConn</b>	University of Connecticut
<b>IAPD</b>	Implementation Advance Planning Document	<b>VBPM</b>	Value-Based Payment Model
<b>IAPD-U</b>	Implementation Advance Planning Document		