I. <u>Project Identification</u>

Project Title: Health Information Exchange/Health Information Technology (HIT/HIT)

Agency Name	**Agency Business Unit**
Department of Social Services	

Your Name (Submitter) | **Phone** | **Email**
Lee Voghel | 860-424-5842 | Lee.voghel@ct.gov

Agency Head | **Phone** | **Email**
Roderick Bremby | 860-424-5053 | Roderick.bremby@ct.gov

Agency CIO / IT Director | **Phone** | **Email**
Lou Polzella | 860-424-5508 | Louis.polzella@ct.gov

Agency CFO | **Phone** | **Email**
Lee Voghel | 860-424-5842 | Lee.voghel@ct.gov

Project Manager (if known) | **Phone** | **Email**
Mark Heuschkel | 860-424-5347 | Mark.heuschkel@ct.gov

OPM Budget Analyst | **Phone** | **Email**
| | |

II. <u>Project Description</u>

A. <u>Project Dates</u>

Proposed Start Date (MM/DD/YYYY)   **Expected Completion Date** (MM/DD/YYYY)   **Project Duration** (in months)

7/1/2012   6/30/15*

included in this package is project through the end of SFY 2015. The HIT part of the project will be ongoing until the federal EHR incentive program ends in 2021. HIE build support should end with the above date.

B. <u>**Project Description -**</u> This information will be used for listings and report to the Governor and
General Assembly on capital funded projects.

Enhancement of State Health Information Technology Capabilities in order to improve treatment delivery to Connecticut's Medicaid population

C. **Summary.**

Summary - Describe the high level summary of this project in plain English without technical jargon
This project comprises a multi-faceted development of improvements to Health Information Technology capabilities within Connecticut. The project will improve the ability of Medicaid health care providers to share health care information to improve care coordination. Additionally, patients will be able to share data with providers as needed.   The improved data sharing mechanisms established via this project will improve the efficiency and efficacy of patients' health care.

Purpose – Describe the purpose of the project
Enhancement of Connecticut's Health Information Technology capabilities will improve the Medicaid population's access to high quality, safe, affordable and efficient healthcare in Connecticut. In addition, patients' active engagement in their own health care will increase as health literacy and active care coordination among care providers, patients, and families are enhanced. Greater use of Health Information Technology to promote evidence-based medicine, public health programs, outcomes monitoring, and research will improve treatment quality. Finally, health IT enhancements will ensure the reliable, private, secure interoperable storage and sharing of healthcare data within Connecticut and between other states as required for safe, effective, and efficient health care.

Importance – Describe why this project is important
This project aligns with the federal Office of the National Coordinator for Health Information Technology's (ONC) and Centers for Medicare and Medicaid Services (CMS) priority to establish a framework for healthcare improvement through the meaningful use of Health Information Technology. It will also lead to more efficient and less costly delivery of health care to Connecticut's Medicaid population, and will empower Medicaid patients to understand and participate in their own treatment more fully. Since Medicaid providers also serve many non-Medicaid patients, health IT improvements resulting from this project can also benefit these individuals and the broader CT citizens.

Outcomes – What are the expected outcomes of this project
The enhanced data sharing mechanisms established via this project will lead to lower costs of health care delivery to Connecticut's Medicaid population and reduced patient readmissions to hospitals. They will also lead to improved patient treatment outcomes, as clinicians will have more comprehensive patient data available to them to use when making treatment decisions.

Approach and Success Evaluation – Provide details of how the success of the project will be evaluated
We will conduct process and outcome evaluation that will answer the following questions: 1. How well did the use of Direct messaging work to coordinate patient care? 2. How many Direct messages were exchanged? 3. Compare the costs of episodes of care pre- and post- Direct implementation based on claims data? 4. Identify the characteristics of a successful patient-centered medical home? 5. How well does the electronic data collection processes match the business process? 6. How well does the current system meet staff and patient expectations?

7. What works and what does not work at each organization?
8. How do patients and staff members perceive the utility of Health IT systems?
9. What improvements can be made so that the Health IT tools can be used to improve the process of care delivery and the quality of care?
10. How do the clinicians and clients rate the information in the HIT Tools?
11. Is there an increase in the demand for accessing information by patients?
12. Is there an increase in the number of clients asking for an electronic copy of their health record?
13. How many providers are using the Direct Services?
14. What are the educational needs of providers for using health IT and health information exchange?
15. What are the barriers preventing providers from participating in the EHR Incentive program?
16. What are the barriers toward achieving meaningful use of Health IT?
17. What types of providers (type of practice, age, race/ethnicity) participate in the EHR Incentive program?

D. **Business Goals**. List up to 10 key business goals you have for this project, when (FY) the goal is expected to be achieved, and how you will measure achievement, Must have at least one. Please use action phrases beginning with a verb to state each goal. Example: "Reduce the Permitting process by 50%". In the Expected Result column, please explain what data you will use to demonstrate the goal is being achieved and any current metrics.

Business Goal (Action Phase)	Target FY for Goal	Current Condition	Expected Result
Create a master Medicaid health care provider directory to serve as an authoritative source of provider information.	FY 2014 FY2015	Currently many organizations around the state, both public and private, maintain provider registries. The data in these registries are inconsistent. These discrepancies create workflow issues when providers and organizations wish to contact each other.	Less contradictory data regarding Connecticut Medicaid health care providers. More accurate count and classification of providers based on consolidated data and removal of obsolete provider listings.
Implement Direct messaging to allow Medicaid health care providers to communicate securely with one another regarding patient care.	FY 2014 FY2015	One of the most significant problems for the Medicaid population is transition of care. As many as 50% of all patients readmitted to a hospital within 30 days of a discharge do not see their primary care physicians between the discharge and the readmission. Data is not efficiently shared between providers when	Reduced rates of hospital readmission for Medicaid patients. Improved patient treatment outcomes due to increased sharing of data across providers.

		patients transition between care settings.	
Create a Medicaid member portal to allow patients to access their treatment data from all of their providers and to designate who can view their data. As a first step, individuals will be able to forward Continuity of Care Documents (CCDs) via the Portal to providers. This will allow individuals to send pertinent health information to providers before their initial visits; providers with EHR systems that accept CCDs will be able to pre-load data about new patients and receive updates on existing patients.	FY 2015	Currently Medicaid patients do not have a comprehensive view of their data that spans all of their health care providers, and do not have an efficient means of sharing this data between providers.	Medicaid health care providers will have more comprehensive data on patients in order to provide higher-quality treatment. Patients will become more involved and empowered in their own treatment. The Indiana Enhanced Medication History (EMH) project demonstrated the utility of CCD data for clinicians. In this project, 4,499 individuals' medication data from multiple sources was aggregated into patient-specific CCDs that were transmitted to clinicians. Clinicians were asked to rate the usefulness of the CCDs' medication data on a five-point Likert scale, with higher scores representing higher degrees of usefulness. Overall, the seven clinicians responding to the survey rated the usefulness of these medication history CCDs at 3.9 out of 5. The clinicians rated the CCD's usefulness at identifying overuse of controlled substances at 4.3 out of 5 (Simonaitis, Belsito et al. 2010).
Work with DPH and DSS to improve IT infrastructure to enable Medicaid health care providers to achieve Stage 1 Meaningful Use of their	FY 2014 FY2015	Currently DPH relies on fax and mail submission of data from Medicaid health care providers regarding immunizations,	Achieving Meaningful Use will result in incentive payments to providers to further develop their use of EHRs. The quality of

Electronic Health Record (EHR) systems. This includes the development of data systems allowing providers to electronically report immunizations, reportable lab results, cancer cases, and bio-surveillance data.		electronic lab results, bio-surveillance, and cancer cases.	data in the affected DPH systems should increase due to the automation of reporting. DPH will be able to eliminate labor-intensive entry of data submitted in hard copy format; there will be a shorter time lag between data submission and data being available for use in the DPH systems.
Improve access to high quality, safe, affordable and efficient healthcare in Connecticut through the Meaningful Use of Health IT	FY2014 FY2015	Currently approximately 20% of Connecticut's providers utilize electronic health records (EHRs) in their practices in support of care delivery and coordination	Increased rates of Health IT adoption, implem-entation, and use of EHRs among eligible professionals Develop Matrix of all proposed Medicaid outcome and reporting metrics that require HIT use. (PCMH, Dual Eligible, Medical Neighborhood)
Increase the active engagement of patients and their families in their own health care by facilitating health literacy and active care coordination among care providers, patients and families	FY2014 FY2015	Approximately 800 eligible professionals out of the estimated 10,000 providers in the sate are participating in the program and receiving incentive payments for using health IT	Increased number of eligible professionals (physicians, dentists, nurse practitioners, and certified nurse midwives) participating in the EHR incentive program Increase the number of communications (emails, phone calls, events) with eligible professionals Percent of eligible Medicaid hospitals who have successfully attested and received incentive payments.
Improve the health of the state of Connecticut's Medicaid population through the use of HIT to promote evidence based medicine, public health programs, outcomes monitoring and research	FY2015	Data collected at the point of care isn't available for the promotion of evidence based medicine, outcomes monitoring and research	Implement data warehouse changes and align them with MITA principles. Develop functional and technical requirements for the extension of the data warehouse to collect

			data from different sources including providers' EHRs, and external systems, e.g., DPH's systems. Conduct targeted trend analysis of clinical quality data in support of Connecticut's Medicaid HIT goals.
Ensure the reliable, private, secure interoperable storage and sharing of healthcare data within Connecticut and between other states as required for safe, effective and efficient healthcare	FY2014 FY2015	Currently, the state lacks an Health information exchange (HIE) and is providers cannot efficiently share clinical care information among providers for treatment purposes across state lines.	Develop a strategic plan for data delivery, storage and usage as related to HIE activities Educate EP's and EH's about Policies and Enforce privacy and security requirements of MU stage 2 through audit strategy.

E. **Technology Goals**. From a technical perspective, following the above example, list up to 10 key technology goals you have for this project and in which Fiscal Year (FY) the goal is expected to be achieved. Please use action phrases beginning with a verb to state each goal. Example: "Improve transaction response time by 10%".

Technology Goal	Target FY for Goal
Implement secure Direct messaging to improve communication between Medicaid health care providers.	FY 2014
Implement secure web-based Medicaid patient data portal allowing patients to view and share health care data.	FY 2015
Implement DPH Immunization Registry, Cancer Registry, lab results reporting system, and syndromic surveillance system in a way that allows Medicaid health care providers to submit data in multiple formats (e.g. using Direct messaging, web-based data entry, etc.).	FY 2014
Upgrade and implement the Medical Assistance Provider Incentive Program Repository (MAPIR) version 5 in support of federal stage 1 meaningful use (MU) changes and new stage 2 meaningful use requirements	FY2014, FY2015
Implement a data warehouse for meaningful use and clinical quality measures that can be used to assess the quality and efficacy of care provided to the Medicaid population	FY2014

F. **Priority Alignment.** The criteria in this table, in concert with other factors, will be used to determine project priorities in the capital funding approval process. Briefly describe how the proposed projects will align with each criterion.

Priority Criterion	Y/N	Explanation
Is this project aligned with the Governor's Key Priorities?	Y	This project is aligned with the Governor's emphasis on health information technology, and use of data for accountability/ transparency and to make policy decisions.
Is this project aligned with business and IT goals of your agency?	Y	This project is aligned with the Commissioner's emphasis on improved care coordination for improved health outcomes, health information technology, and data analytics to support performance measurement, accountability, transparency and policy decisions.
Does this project reduce or prevent future increases to the agency's operating budget?	Y	This project aligns with efforts to reduce the growth of health care expenditures.
Will this project result in shared capabilities?	Y	Developed HIE functions are envisioned to support all providers and patients statewide.
Is this project being Co-developed through participation of multiple agencies?	Y	Yes, in coordination with HITE-CT, DPH, and UConn
Has the agency demonstrated readiness to manage project of this size and scope?	Y	Yes, we have contracting with UConn for assistance in management and subject-matter expertise.
Is the agency ready to deliver the business value proposed?	Y	Yes, for reasons cited above.

G. **Organizational Preparedness**. Is your agency prepared to undertake this project? Is senior management committed, willing to participate, and willing to allocate the necessary time, energy and staffing resources? How will the project be managed and/or governed and who will make the key project decisions?

> The senior leadership is committed to this project. The HIE aspects of the project will be managed through a collaboration with HITE-CT and the HIT coordinator. The HIT aspects will be managed through a collaboration between DSS and the UConn Health Center Biomedical Informatics Division.

H. **Project Ramp Up**. If capital funds are awarded for this project, how long will it take to ramp up? What are the key ramp-up requirements and have any off these already been started? For example, has a project manager been identified? Has an RFI been issued? Is a major procurement required such as an RFP?

> 1-3 months to get the contracts in place; A project manager for the HIT components has been identified

I. **Organizational Skills**. Do you have the experienced staff with the proper training to sustain this initiative once it's a production system? Do you anticipate having to hire additional staff to sustain this? What training efforts are expected to be needed to maintain this system?

> The skills needed for this project come from the partnership with HITE-CT and HIT coordinator and a partnership with the UConn Health Center Biomedical Informatics Division. Staff will be hired to support the EHR Incentive program goals and ongoing education and outreach will be available.

J. **Financial Estimates.** From IT Capital Investment Fund Financial Spreadsheet

Estimated Total Development Cost	Estimated total Capital Funding Request	Estimated Annual Operating Cost	One Time Financial Benefit	Recurring Annual Financial Benefit
$14,836,928	$1,577,156	$0	$13,259,772	$0
Explanation of Estimates				
Estimates are based on the information received from program staff. The total development cost is reimbursed by the Federal Government at an 89% FFP rate.				

III. <u>Expanded Business Case</u>

A. **Project Impact.** Beyond the top business goals identified in Section II, 1) What impacts will this project have, if any, in the targeted areas below 2) What would be the impact of not doing this project 3) How will the project demonstrate benefits are achieved.

(1) Impact Area (Vision)	Description of Project Impact
Will this project provide efficient and easily accessible services for all constituents?	Yes. The Direct implementation follows the federal guidelines and anyone willing to join the Direct marketplace can do so. Adoption of Health IT is necessary for the use of Direct.
Will this project promote open and transparent government with the citizens of the state?	Allowing citizens to have access to their health information and giving them the control over whom they share this information with, results in empowered citizens that are participating in their health care through shared decision-making. Patient-Engagement is one of the underlying goals of the HIT components of this project.
Will this project establish efficient and modern business processes?	This project is based on the standards that are being developed and enhances the pace of adoption of these standards and increases interoperability among systems which is one of the goals of the HITECH Act.
Will this project increase accuracy and timeliness of data for policy making, service delivery and results evaluation?	Through the use of Direct messaging, health information is transported in a timely, secure, and effective manner so that clinicians can deliver effective care. By collecting clinical data at the point of care, more data is available and captured for assessing quality of care provided.

2) What is the expected impact of NOT doing this project?
Without the adoption and use of health information technology and health information exchange eligible providers will continue to be inefficient in the timely use and exchange of health information via fax, mail, or telephone. Providers and the state Medicaid office will not have access to data collected at the point of care to assess quality and costs effectiveness of services provided.

(3) How will you demonstrate achievement of benefits?
Evaluation of the project will answer the following questions: 1. Compare the costs of episodes of care pre- and post- Direct implementation based on claims data? 2. Identify the characteristics of a successful patient-centered medical home? 3. How well does the electronic data collection processes match the business process? 4. How well does the current system meet staff and patient expectations? 5. What works and what does not work at each organization? 6. How do patients and staff members perceive the utility of Health IT systems? 7. What improvements can be made so that the Health IT tools can be used to improve the process of care delivery and the quality of care? 8. How do the clinicians and clients rate the information in the HIT Tools? 9. Is there an increase in the demand for accessing information by patients? 10. Is there an increase in the number of clients asking for an electronic copy of their health record?

B. **Statutory/Regulatory Mandates.** 1) Cite and describe federal and state mandates that this project in intended to address. 2) What would be the impact of non-compliance?

(1) Statutory / Regulatory Mandates:
This is part of the HITECH Act an the EHR implementation program

(2) Impact of non-compliance:
Connecticut eligible professionals and hospitals would not be eligible to receive EHR incentive payments from CMS, thus far over $3.8M has been paid to physicians and other eligible providers to date.

C. **Primary Beneficiaries.** Who will benefit from this project (citizens businesses, municipalities, other state agencies, staff in your agency, other stakeholders) and in what way?

Primarily the Medicaid population but also all the citizen of CT by creating a functional and connected health care delivery system that is timely, safe, effective, efficient, patient-centered, equity-, and value based.