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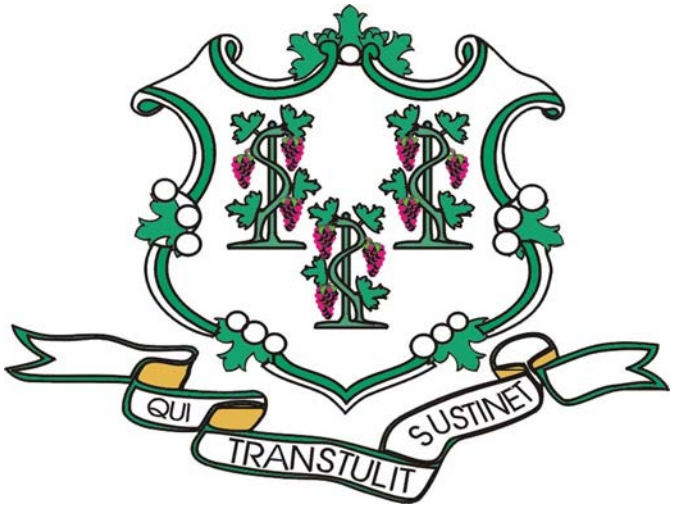

State of Connecticut
Department of Social Services
Division of Health Services

Annual Health Information Technology Implementation Advance Planning Document For Federal Fiscal Years 2018-2019

Version: 6
Date: 4/3/2017

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Version Record

Version Number	Date	Reviewer	Comments
1.0	3/20/2011	CMS	Initial CMS Approval
2.0	8/8/2012	CMS	Approval for FFY 13-14
3.0	11/6/2014	CMS	Approval for FFY 15 -16
4.0	2/18/2016	CMS	Approval for FFY 16-17
5.0	2/8/2017	CMS	As needed update including SIM statewide planning for FFY 17
6.0	5/1/2017	CMS	Annual update for FFY 18-19

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Section 1: Executive Summary

In accordance with 42 CFR Part 495.338, the State of Connecticut Department of Social Services (Department) submits this Health Information Technology Annual Implementation Advanced Planning Document Update (HIT IAPD-U) to obtain enhanced 90 percent Federal Financial Participation (FFP) for the continued implementation and administration of the Electronic Health Record (EHR) Incentive Program (Program) for Connecticut Medicaid. Funding is requested to support the following efforts which were supported by the Center for Medicare & Medicaid Services (CMS) in prior HIT IAPD submissions and/or in alignment with the vision and goals of the Connecticut Medicaid Health Information Technology Plan (SMHP) approved August 29, 2016 :

1. Administration of the Medicaid Electronic Health Record (EHR) Incentive Program, including
    - Provider Outreach
    - Attestation system changes for program year 2017 and 2018
    - Pre-payment validation and post payment audits

2. Continue to improve information exchange by enhancing interoperability hub for Medicaid using Direct Messaging services via the MEDS Project: The Secure Transport of Electronic Prescriptions of Medicaid Equipment and Supplies (MEDs)

3. Continue to improve outcomes for Medicaid recipients utilizing Alerting via Project Notify: The Medicaid Alert, Discharge, Transfer Notification System

4. Continue to improve data quality and robustness of provider data utilizing additional data sources via Provider Registry: Medicaid Provider Registry Project

5. Continue to encourage and assist providers to submit eCQM data using QRDAs 1 and/or to our popHealth certified solution in the Zato Health Platform

6. Expanding the use of Personal Health Records to Medicaid recipients beyond Long Term Services and Support populations in FFY19 thus assisting Medicaid Electronic Health Record Incentive Program participants to meet Meaningful Use patient-centered measures. (Stage 3 EP measure 5 – Patient Electronic Access)

7. The Design, Development, and Implementation of a Business Intelligence and Shared Analytics Solution supporting continued development of quality improvement initiatives within Medicaid. (Stage 3 EP measure 6 – Coordination of Care and Clinical Quality Measure Reporting)

Between 2014 and 2016 the Department of Social Services was charged with leading the state Health IT and HIE agenda. Over a period of two years much work was completed by the department to establish a governance and a statewide HIE plan by DSS Commissioner guided by the PA 14-217 and PA 15-146. In June 2016, the Statewide plan was approved by the secretary of OPM for DSS to continue with the implementation of the EMPI, Provider Registry, and the Alert Notification engine. In addition, this plan called out the need to initiate a robust stakeholder engagement process to establish the value proposition, as well as a sustainable business model. This responsibility was shifted to the HITO in July 2016 and the current robust stakeholder engagement is a conclusion of the work recommended in the plan published by DSS in January 2016. In parallel the Department has continued to establish the network-of network model and will complete the build and implementation of the Medicaid node using the Intersystems platform.

As outlined in the previously submitted IAPDU for FFY 17, planning activity is underway for Statewide HIT/E efforts. The State's HIT strategy, through the establishment of the Health Information Technology Officer (HITO) under Connecticut's Public Act 16-77 (P.A. 16-77) enables the State HITO to coordinate with Medicaid and other State and private partners to strengthen the State and federal efforts to accelerate the adoption of health information technology, promote health information exchange, and encourage the utilization of certified EHRs. Connecticut plans to submit an IAPD update later this year for additional statewide HIT/E planning and implementation activities, once the initial planning efforts are completed by 4th Quarter FFY 2017.

This Annual HIT IAPD is for the period from October 1, 2017 through September 30, 2019.

Table 1: Funding Request Summary

	MMIS (90%)			HITECH(90%)			HITECH-HIE(90%)			TOTAL		
Year	Fed	State	Total	Fed	State	Total	Fed	State	Total	Fed	State	Total
FFY 2017	464,839	51,649	516,488	5,779,097	642,122	6,421,219	2,946,310	327,368	3,273,678	9,190,246	1,021,138	10,211,385
FFY 2018	464,839	51,649	516,488	6,181,200	686,800	6,868,000	1,529,381	169,931	1,699,312	8,175,420	908,380	9,083,800

Connecticut has been executing the Medicaid EHR Incentive Program since 2013 As of February 24, 2017 the State has disbursed $62,062,812 at 100% to Eligible Professionals and $43,844,166 at 100% to Eligible Hospitals. **The State is requesting $6,800,000 at 100% FFP for Medicaid EHR Incentive Program payments in FFY 2018 and $6,800,000 at 100% FFP for Medicaid EHR Incentive Program payment in FFY2019.**

Section 2: Results of Activities Included in the Planning Advanced Planning Document and SMHP

PAPD Activities and Close Out

All planning elements under the PAPD were completed between May 11, 2010 and October 7, 2011 when the State requested CMS to officially close the PAPD.

Funding Request History

A summary of HIT IAPD funding requests to CMS is listed in Table 2 below.

Table 2: Funding Request History

Approval Date	Title	Funding Period	Related to HIT		Related to MMIS		Related to HIE	
			Total	FFP	Total	FFP	Total	FFP
5/11/10	PAPD	5/11/10-10/7/11	$566,000	$509,400	$205,719	$185,147	-	-
11/15/10	IAPD*	10/1/10-12/31/11	-	-	$299,607	$269,646	-	-
3/20/11	IAPD	10/1/2010-9/30/12	$2,545,131	$2,290,618	-	-	$205,719	$185,147
12/21/11	APD-U*	10/1/10-12/31/11	$297,690	$267,921	-	-	-	-
8/8/12	Annual IAPD	10/1/12-9/30/15	$5,396,494	$4,856,846	$660,840	$594,756	-	-
6/26/13	APD-U	10/1/12-9/30/15	$5,396,494	$4,856,846	$1,438,598	75%$252,000 90%$1,186,598 $1,256,938	$3,510,003	$3,159,003
4/30/13	APD-U	10/1/12-9/30/15	$5,396,494	$4,856,846	$1,138,097	$1,024,288	-	-
11/6/14	Annual IAPD	10/1/14-9/30/16	$8,651,189	$7,786,078	$1,022,900	$920,610	$753,076	$677,768
2/18/16	Annual IAPD	10/1/15-9/30/17	$8,630,800	$7,767,720	$1,335,900	75% $189,00 90% $975,510 $1,164,510	$5,470,827	$4,923,744
10/24/16	APD-U	10/1/16-9/30/17	$4,394,268	$3,954,841	$695,701	75% $126,000 90% $474,931 $600,931	$3,508,828	$3,157,945
5/4/2017	APD-U	10/1/16-9/30/17	$4,394,268	$3,954,841	$695,701	75% $126,000 90% $474,931 $600,931	$1,624,318 Statewide HIT/E planning	$1,461,886 Statewide HIT/E planning

**Submitted by State of Pennsylvania on behalf of the MAPIR Multi-State Collaborative*

Activities under IAPD, SMHP and Current Status

An SMHP was approved March 23, 2011 with an update approved August 29, 2016.

Table 3: Activities under SMHP and IAPD

Project	Activity	Activity Status			
		In Design	In Development	Implemented	Ongoing
Medicaid Electronic Health Record Incentive Program	Development and On-Going Enhancement of MAPIR	✓	✓	✓	✓
	Pre-Payment Attestation Review process automated (Attestation dashboard and review assignment, Patient Volume calculations, and review checklist).	✓	✓	✓	✓
	Develop and Implement Direct Messaging Program to support Meaningful Use	✓	✓	✓	✓
	Post-Payment Auditing of EHR Incentive Program Providers	✓	✓	✓	✓
	EHR Incentive Program Provider Outreach and Education	✓	✓	✓	✓
	Outreach Plan	✓	✓	✓	✓
	Collection of eCQMs for Medicaid providers	✓			
Secure Transport of Electronic Prescriptions of Medicaid Equipment and Supplies (MEDs)	Utilization of Direct Messaging for Providers	✓	✓	✓	✓
	Develop test cases	✓	✓	✓	
	Design and Development of Web Forms	✓	✓	✓	
	User Acceptance Testing and System Acceptance Sign-Off	✓	✓		
	Onboard Physicians and MEDS providers	✓	✓		
	Beta-Testing with Providers	✓			
	Training and Outreach to Physicians and MEDS providers	✓	✓	✓	✓
Medicaid Enterprise Provider Registry	Kick Off Meeting	✓	✓	✓	
	Testing Feeds	✓	✓		
	Go Live 4th quarter FFY 17				
Project Notify: Medicaid Alert, Discharge, Transfer Notification	Kick-Off Meeting		✓		
	On Boarding Hospitals	✓	✓		
	On Boarding Physicians and Physician Groups	✓	✓		
Department Statewide HIT Strategic Plan	Develop/Submit State-wide plan to CT Office of Policy and Management	✓	*Responsibility transferred to Health Information Technology Officer, July 1, 2016*		

Section 3: Statement of Needs and Objectives

Connecticut's Medicaid Health Information Technology vision aligns with the priorities of the CMS and the Office of the National Coordinator for HIT (ONC) to establish a framework for healthcare improvement. The following section represents an update of the Medicaid HIT Program's needs and includes a new funding request to further advance the Department's Business Intelligence Competency Center (BICC) that was established in 2014.

Medicaid HIT Program Needs Alignment with Department of Social Services HIT Vision and Goals

The program needs in this FFY 18-19 request are aligned with the following Medicaid HIT Vision and Goals:

Table 4: Department's HIT Vision and Goals

CT Department of Social Services Health IT Vision: **1. Empower individuals and those that provide health resources to achieve better health outcomes through improved access to secure and private health information.** **2. Develop a Health IT framework based on shared values across state agencies.**	
Goal 1:	Facilitate and accelerate the adoption of certified EHRs by eligible providers and advance meaningful use.
Goal 2:	Strengthen the Department's ability to deliver person-centered, evidence-based healthcare by integrating health information technologies.
Goal 3:	Enhance health outcomes by utilizing eCQMs for Medicaid and Department Programs

Goal 1: Project 1 – (Continue) Medicaid EHR Incentive Program Needs

The Department has identified the following needs to support the ongoing administration of the EHR Incentive Payment Program. These requirements are described in the SMHP approved by CMS in 2016.

- **State Staff:** State staff is needed to continue to administer, oversee, and monitor implementation of the Program. Seven (7) State staff in varying time equivalency are needed to fulfill the obligations of the program. Detailed State personnel responsibilities and costs are outlined in Section 5.

- **MAPIR:** Continued design, development, and implementation enhancements to the Medicaid Assistance Provider Incentive Repository (MAPIR) are needed to ensure appropriate and accurate EHR incentive payments to eligible Medicaid Professionals and Hospitals (where applicable) who meet Meaningful Use. See Appendix A for breakout of expenditures for MMIS FFP and how it will be integrated in the project.

- **EHR Incentive Program Objectives**:

- Adhere to 42 CFR Part 495 by operationalizing MU Stages 2 and 3 within the MAPIR system, automated pre-payment review system, and post-payment auditing of eligible professionals and hospitals.
- Increase time efficiency from the time of attestation submitted to payment authorized via the automated attestation pre-payment review process.
- Continue successful participation by Eligible Professionals and Hospitals (EPs/EHs) in the EHR Incentive Program meeting Meaningful Use.

- **Pre-Payment Review:** Ongoing pre-payment reviews of EPs/EHs attesting to the Program via MAPIR are needed. The review process has been highly automated affording standardization in review and payment authorization. Enhancements to the automation would further support increased efficiencies and accuracy in reviews.

- **Post-Payment Auditing:** The Department has contracted with Myers and Stauffer LLC to provide audit services detailed in the SMHP.

- **Education and Outreach:** Education and Outreach to EPs is needed to ensure providers are knowledgeable about meeting Meaningful Use Stages 2 and 3 and are supported in appropriately attesting to the Program. Additionally, EPs continued engagement with the Program is needed and can be achieved by implementing education and outreach strategies. The Department and its partners will continue to support the following efforts:

  - Thorough and constant communication, as needed, with providers in the midst of attesting.
  - Schedule and conduct information sessions with providers planning to attest in program years 2017-2019.
  - Create targeted email campaigns to contact and inform providers that have previously attested in prior years, but did not attest in PY 2016 (non-returning providers).
  - Schedule and conduct Information sessions with non-returning providers.
  - Monitor the EHR Incentive Program support phone line and email system to address questions submitted by providers about the attestation process.
  - Further develop and maintain an EHR Incentive Program website with Program overview, attestation materials/documents, hyperlinks to other important websites, instructions on how to attest, Program policies (such as “what it means to be audited”), and frequently asked questions (FAQs) and future issues identified by the support line and email.
  - Communicate important message releases detailing Program deadlines, adjustments to the Program, and explaining common issues highlighted through review communications or the support line and email.

Goal 2 Project 1: (Continue) MEDS Project Needs - Direct Messaging of Electronic Prescriptions of Medical Equipment Devices and Supplies (MEDS)

CT Law (P.A. 14-217) requires the electronic transmission of prescriptions for reimbursements under Medicaid for durable medical equipment. The MEDS project is facilitating the use of Direct Messaging to submit MEDS prescriptions electronically utilizing the Health Information Service Provider (HISP) implemented by the Department in 2014 under a previously approved HIT IAPDU. This feature enables Connecticut providers and practitioners to submit

orders electronically and in standard way. The Department has identified the following needs to continue implementation efforts to further compliance with State law and the advancement of Direct Messaging to the Medicaid provider community:

- Continued Direct HISP services**:** Ongoing services of the HISP vendor Secure Exchange Solutions (SES) include annual subscription, HISP to HISP testing, software maintenance and domain annual subscription is needed to continue the MEDS Project. The costs of continued services are allocated between the MEDS Project and Project Notify.

- Enhancements to web based MEDS prescription forms configured to the CT domain**:** Enhancements to the unique MEDS prescription forms are needed to expand for both providers in the CT Direct Domain and providers outside the domain.

- Provider and MEDS Provider Education and Onboarding Support**:** SES will need to ramp up outreach, enrollment, verification and training to MEDS project participants post beta-testing phases to ensure effective implementation of the project.

- MEDS Project Objectives

    - Ensure compliance with Connecticut Law P.A. 14-217.
    - Establish a standard method to securely send and receive prescription orders for MEDS supplies.
    - Decrease risk of errors due to ineligibility to decrease risk of fraud, waste, and abuse.
    - Build it using standard interfaces so it can integrate with Statewide planning efforts

Goal 2 Project 2: (Continue) Medicaid Enterprise Provider Registry Program Needs

The Medicaid Enterprise Provider Registry (EPR) is currently in Phase I implementation with the primary objective to implement and establish the EPR solution in the State's Bureau of Enterprise Systems and Technology (BEST). The planned go-live date is June, 2017. Initial data feeds from a variety of sources (Medicaid, Community Health Network-CT which is the State's Medicaid medical Administrative Service Organization (ASO), the fiscal intermediary for the Community First Choice Program, the Connecticut licensure database, and the National Plan and Provider Enumeration System's National Provider Identity database) will be used to populate the Provider Registry for Phase 1. Completion of Phase 1 will ultimately make the EPR available to other ASOs and State agencies as a shared service.

The Department has identified the following needs to continue Phase 1 and develop Phase 2 requirements:

- License Agreement**:** Continuation of NextGate vendor license agreement.

- Relationship Registry**:** The Purchase and implementation of the NextGate Relationship Registry enabling the development of additional use cases as an enterprise-wide asset and for Phase 2 development.

- Project Management**:** Additional project management support for Phase II enhancements.
- Medicaid Provider Registry Program Objectives

  - Serve as the authoritative, best record source of Medicaid provider information.
  - As an Enterprise solution, expand the State's shared services library increasing its Service Oriented Architecture.
  - Establish EPR as a modular solution that can be used in the Medicaid Enterprise System.
  - Build it using standard interfaces, so it can integrate with Statewide planning efforts.

Goal 2 Project 3: (Continue) Project Notify Needs: The Medicaid Provider Alert, Discharge, Transfer (ADT) Notification System Program

Project Notify will implement an automated real-time alerting system to inform Medicaid providers of specific care events for their patients. The initial events include the admission and discharge of a person from an inpatient or emergency department setting. Future phases will extend the types of care settings that send and receive alerts.

The Department is continuing the outreach, design, development, and implementation process for the ADT project and is preparing to receive ADT data and send alerts. Efforts have included initial rule development for routing messages and identification of appropriate information to appear in the alert messages completed by the Department's vendor SES. Outreach has resulted in two Federally Qualified Health Centers signing business associate agreements with the Department. Outreach continues with the Connecticut Hospital Association to extend their ADT feed beyond its current use with the Community Health Network-CT's Intensive Case Management Program to wider Medicaid use. Additionally, the Department is working directly with the hospitals to get the ADT feed for processing the alerts. To continue efforts on the project, the Department has identified the following needs:

- License Agreement: Continuation of SES license agreement.

- Increase Data Feed: Continuation of funds to expand the number of facilities to transmit ADT data to the Project Notify hub.

- Project Management**:** Project management for continued design, development, and implementation efforts.

- Project Notify Objectives

  - Facilitate improved communications and coordination with the patient and/or care manager within days of discharge.
  - Enhance medical decision making with scheduled in person visit when needed.
  - Optimize transitional care management and notify home health and case managers of ED and inpatient visits.

Goal 2 Project 4: (SMD 16-003) **Personal Health Record for Medicaid Recipients**

The Department plans to build on the HIT goals of the Testing Experience and Functional Tools (TEFT) grant, of which Connecticut is a recipient. At the completion of the TEFT grant in 2018, the Department will have demonstrated the use of a Personal Health Record (PHR) to community-based long term services and supports for recipients. This IAPD request is to expand and enhance the use of the PHR beyond community based long term services and supports to additional Medicaid recipients. The expansion has two effects: increasing access to additional Medicaid recipients to their own health information electronically; and supporting EPs in meeting Meaningful Use measures for Patient Electronic Access to Health Information and Coordination of Care through Patient Engagement.

Additionally, the Department aims to enhance the PHR with a Personal Health Assistant application within the PHR that supports people making better health choices based on interactive and preferred criteria set by the person.

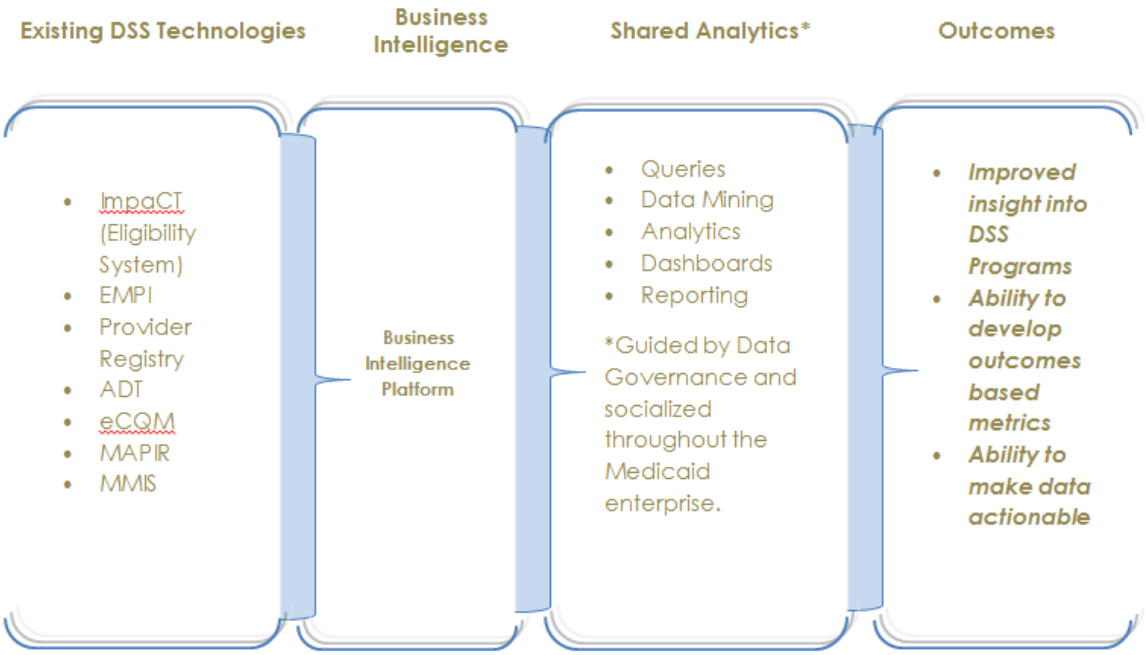
Goal 3 Project 1: **Business Intelligence and Shared Analytics (BISA) Solution Program Needs**

The adoption of EHRs among Medicaid providers has brought an exponential growth in the availability of clinical data. The successful rollout of the HITECH program has resulted in this unique opportunity for Connecticut to pursue a data driven approach to improve outcomes. Clinical and Administrative data need to be integrated and analyzed holistically to improve quality and lower costs. The Department is requesting funding to establish and implement an innovative Business Intelligence and Shared Analytics (BISA) solution. BISA will establish organizational capabilities and build an environment that provides effective insight into the Department's programs. This effort will be accomplished by leveraging advanced analytics and business intelligence to drive information-based decisions to improve outcomes and the quality of life for Connecticut citizens.

We also understand that these efforts have to be sustainable and leverage existing assets. The Department intends to reuse and leverage Zato Health Platform (ZHP) as one of the base solutions for indexing all of the Department's data. An added benefit is that ZHP is ONC certified by the Open Source Electronic Health Record Alliance (OSEHRA). Currently, ZHP passed all 93 c3 items (CQMs) in internal testing from local copy of Cypress. The system passed the CQM measure portion of the InfoGuard certification testing on March 1, 2017. OSEHRA mapped internal engineering quality management procedures to ISO 9001 so that the 5.0 version of popHealth will result in certification for the applicable criterion. This will enhance our ability to take QRDAs to process the selected eCQMs being submitted by Eligible Professionals. Additionally, the Department will leverage this methodology to collect other standards-based clinical quality measures for other initiatives.

The Department will also use the technologies already purchased to create a scalable and flexible BISA infrastructure:

Figure 1: Department Existing Technologies within BISA



The use of this technology provides the Department a cost-effective and efficient way to measure outcomes, operational efficiencies, issues, and impacts. To achieve this vision, the Department will need to leverage its vast amounts of data (which are currently in many formats and disconnected), advanced analytics, and provide self-service user options to drive information-based decisions. The Department needs to transition from retrospective-information-focused events that happened to prospective-insight-focus identifying the causes of the events before they happen. Essentially, moving from descriptive-standard-reporting (regulative business model) to predictive and prescriptive analysis (generative business model).

The Department will use a phased approach. BISA solution cost savings can be realized through the following activities:

- Implement a phased approach focusing on modular deployment of technologies.
- Use simple visualization solutions that are off-the-shelf and scalable.
- Leverage existing systems (such as EMPI and Provider Directory), software, and infrastructure as appropriate to meet solution requirements.

This solution will follow a modular, flexible approach to systems design consistent with the MITA 3.0 guidelines, CMS Seven Conditions and Standards, and Service-Oriented Architecture (SOA) design principles for FFP.

The Department has identified the following needs to develop and implement the BISA solution:

- License Agreement:

- Renewal of license agreement for Zato Health Platform.
- Renewal of other existing Health IT licenses as appropriate.

· Acquire visualization software that will be used to standardize a dashboard.

· Project Management: Project management for design, development, and implementation efforts.

· Contractor Analytics Personnel: Contracted staff to conduct analysis from the BISA on behalf of the Department.

· BISA Program Objectives:

- Empower people to be in charge of their health;
- Improve patient care coordination resulting in a better quality of life;
- Improved health outcomes at the person, system, and population level;
- Reduce the number of unnecessary tests and procedures;
- Reduce medical errors and missed diagnosis;
- Enhance the use of data (structured and unstructured) for business intelligence and outcomes-based decision-making;
- Improve quality reporting and public health surveillance; and
- Reduce health care costs.

Section 4: Statement of Alternative Considerations

When Connecticut began its EHR Program, joining the MAPIR Collaborative was determined to be the most viable alternative. It provided the opportunity to partner with the Pennsylvania Office of Medical Assistance Program, and twelve other HP client states, to build and use a new application known as the Medical Assistance Provider Incentive Repository (MAPIR) to meet the requirements of the Medicaid EHR Incentives Program in the most cost-effective, timely, and efficient manner. Several of the projects involve updating the existing MMIS portal and other existing systems. The State plans to continue this partnership under this IAPD.

The BISA request, as described in Section 3, is favored over two other alternative options:

Alternate Consideration 1: Procure a large, standalone system currently available on the market. Alternative consideration 1 is not viable as it is cost prohibitive; most systems do not have flexible and elastic databases; and most systems are based on centralizing information. Additionally, this does not comport with the MITA seven (7) Standards and Conditions.

Alternate Consideration 2: The Department can take a 'do nothing' approach continuing to procure best-in-breed technologies based on the individual business unit's needs. Alternative consideration 2 is also not viable as data from these technologies will continue to be disparate and unconnected. It is also cost prohibitive as it does not support a systematic approach to technology procurement and developing efficient Department program business processes.

The BISA solution as requested in Section 3 is an enterprise-based solution and therefore once implemented will benefit all of the Department programs and business areas. Because BISA is modular designed it will advance the Department's MITA maturity model.

Section 5: Personnel Resource Statement

The Department plans to continue to dedicate State personnel to oversee and manage the various Medicaid HIT Projects, specifically through the Medical Operation's Health Information Technology Unit.

Additionally, the Department will continue to partner with vendors to support the EHR Incentive Program's pre- and post-payment auditing services and education outreach services. Contractors will also support the additional Medicaid HIT projects: MEDS project, Project Notify, Provider Registry, and Business Intelligence Share Analytics Solution. Table 5 outlines the State Personnel Resources and Table 6 Outlines the Contractor Resources for FFY 18-19.

Table 5: State Personnel Resources

Connecticut Department of Social Services Staff Title	2018			2019			Description of Responsibilities
	% of Time	Project Hours	Cost with Benefits	% of Time	Project Hours	Cost with Benefits	
Medical Operations Manager	0.50	1,040	$101,452.93	0.50	1,040	$104,496.51	Responsible for the overall administration and operations of the Medicaid Systems, which includes the MMIS and Medicaid EHR Incentive Payment Program/MAPIR systems.
Health Program Supervisor	1.00	2,080	$170,412.31	1.00	2,080	$180,719.05	Leads the Department HIT unit and the overall administration of the Medicaid EHR Incentive Payment Program. Reports directly to the Medical Administration Manager and supervises Health Program Associate and Health Program Assistant 1. Acts as the Department's designated primary contact with CMS.
Health Program Associate	0.85	1,768	$129,922.84	0.85	1,768	$137,805.56	Lead staff person responsible for adherence to federal regulations, development and maintenance of operational procedures, standards, policies, and quality improvement initiative. Reports to the Health Program Supervisor.
HealthProgramAssistant1	0.75	1,560	$95,739.61	0.75	1,560	$101,570.15	Serves as subject matter expert for meaningful use and clinical quality measures, and oversees the Provider Engagement, Education and Outreach campaign. Reports directly to the Health Program Supervisor.

HealthProgramAssistant2	0.25	520	$32,766.40	0.25	520	$34,761.87	Assists with HIT/HIE contract administration, and development, tracking and compliance of the federal Advance Planning Documents (APD).
Director of Quality Assurance	0.10	208	$24,770.29	0.10	208	$25,513.41	Responsible for the overall administration and operations of the Quality Assurance Division. Manages and serves as primary contact for the Department's audit activities, vendors, and contracts.
Supervising Accounts Examiner	0.10	208	$19,974.28	0.10	208	$20,573.54	Assists the Director of Quality Assurance with management and tracking of vendor services.
Grand Total			**$575,038.66**			**$605,440.09**	

Table 6: Contracts/Contractor Personnel Resources

Contractor Cost Category	Vendor	2018	2019	Description of Services	HITECH/MMIS or HIE?
EHR Program Administration, Pre-Payment Audit, and Education and Outreach	University of CT School of Nursing	$800,000	$800,000	UConn conducts pre-payment audits on eligible professionals participating in the Medicaid EHR Incentive Program. UConn also provides education and outreach to these eligible professionals.	HITECH
EHR Program Post-Payment Audit	Myers & Stauffer	$324,300	$341,250	M&S assists the Department with CMS required audit functions. This includes conducting desk and field reviews for both eligible professionals and eligible hospitals participating in the Medicaid EHR Incentive Program. M&S is also updating the audit strategy that properly outlines the Departments audit plans for AIU and MU.	HITECH
EHR Program Operations and MMIS/MAPIR Customization	HP Enterprises, LLC	$149,280	$149,280	HPE continues to customize MAPIR for administration of the Medicaid EHR Incentive Program. HPE also offers general information on the program and technical assistance with the online application process to eligible professionals and eligible hospitals.	HITECH
Direct Messaging Health Information Services Provider	Secure Exchange Solutions	$139,400	$229,400	SES will continue providing ongoing Direct Messaging services. SES will create and maintain secure web based Medical Equipment and Supplies (MEDS) prescriptions for Medicaid providers and DME vendors. The Department is also working with SES on Project Notify. SES will receive and process ADT data and send alert notifications.	HITECH
DSS Enterprise Project Management Office	Health Tech Solutions	$441,000	$441,000	DSS EPMO will provide the project management and SME support for Project Notify, Provider Registry and planning documents	HITECH

Relationship Registry	NextGate	$256,000	$83,430	DSS currently owns and operates the EMPI and the PR which are both NextGate products. DSS is purchasing the NextGate Relationship Registry to enhance and seamlessly create an attribution between person and providers	HITECH
Business Intelligence Shared Analytics & eCQMs	Zato	$676,000	$676,000	DSS BISA initiatives built on the existing Health IT tools that DSS has procured since 2011 and leverages and extends the use of those tools to analyze the agency data to improve performance	HITECH
Patient Health Record	TBD	$700,000	$350,000	The PHR record that was implemented as part of the TEFT grant will be extended for use to all Medicaid beneficiaries to help DSS meet the person-centered measures identified in the EHR Incentive Program	HITECH
Integration Platform	Intersystems	$0	$1,062,000	Integration engine to provide Medicaid with the capability to inetegrate clinical data including HL7, IHE, C-CDA.	HITECH
Technical and Analytics SME	TBD	$624,000	$624,000	Contractor staff to support all the DSS initiatives outlined above	HITECH
Total Contract Cost		**$4,109,980**	**$4,756,360**		

Section 6: Proposed Activity Schedule

The activities required to complete the requested HIT objectives are provided in Program Activities below.

Table 7 Proposed Activity Schedule

Program	Project Activity	Start Date *(Federal Fiscal Calendar)*	End Date *(Federal Fiscal Calendar)*
EHR Incentive Program	Engage in multistate collaborative for MAPIR development process for MU Stages 2-3	Q3 / 2010	On-Going
	Continue to support enhancements in the MAPIR system to improve functionality for state and provider use.	Q3 / 2010	On-Going
	Continue to refine automation processes for pre-payment attestations review and approvals including operationalizing Standard Operating Procedures for MU Stage 3 and MACRA changes.	Q3 / 2016	On-Going
	Conduct quality review of pre-payment reviews and provide feedback, corrective action if necessary to vendor performing pre-payment reviews.	Q1 / 2016	On-Going
	Conduct monthly desktop and onsite post-payment audits.	Q1 / 2016	On-Going
	Receive regular feedback on processes and audit outcomes from post-payment vendor.	Q1 / 2016	On-Going
	Maintain and implement updates to EHR Incentive Program Website	Q3 / 2016	On-Going
	Outreach Plan for FFY 2018-2019	Q3 / 2017	Q4 / 2017
	Implement Outreach Plan	Q1 / 2017	Q4 / 2019
	Monitor and evaluate outreach plan for effectiveness via monthly vendor meetings and quarterly performance reporting.	Q1 / 2017	Q4 / 2019
	Continue to participate with and collaborate on interagency Meaningful Use Workgroup with the Department of Public Health, CT Hospital Association, and CT Office of Policy and Management.	Q1 / 2015	On-Going
	Continue to support Direct Message accounts by EPs.	Q1 / 2014	On-Going
	Submit quarterly, annual reporting to CMS.	Q3 / 2010	On-Going
	Submit fully updated SMHP reflecting current ‘As-Is’ and ‘To-Be’ State of HIT in CT.	Q1 / 2017	Q2 / 2018
	Capture eCQMs by Eps	Q2 / 2018	On-Going
MEDS Program	Continue to support Direct Messaging accounts	Q4 / 2016	On-Going
	Enhance electronic MEDS forms	Q4 / 2016	Q4 / 2019
	Develop and implement training and outreach plan for Physicians and MEDS providers	Q4 / 2016	Ongoing
	Develop plan to incorporate providers outside the CT Domain	Q1 / 2018	Q2 / 2018
	Onboard Physicians and MEDS providers	Q1 / 2016	Ongoing
	Distribute MEDS program information via the MMIS eMessaging service	Q2 / 2017	Ongoing
	Monitor enrollment data and gather feedback from providers to enhance or alter processes	Q1 / 2016	Ongoing

Medicaid Provider Registry	Implement Phase 1	Q4 /2017	Q4 /2017
	Onboard additional data sources	Q1 / 2018	Ongoing
	Integrate with other Medicaid and state systems	Q1 / 2018	Ongoing
	Implement relationship module (Provider to patient attribution)	Q2 / 2018	Q4 / 2018
Proj. Notify (Medicaid ADT)	Develop additional use cases for Alerting	Q1 /2018	Q4 / 2019
	Configure Alerting engine for additional alerts	Q1 /2018	Q4 / 2019
	Onboard additional providers	Q1 /2018	Ongoing
	Conduct outreach	Q1 /2017	Ongoing
Business Intelligence and Shared Analytics (BISA)	Aggregate Department data	Q1 /2018	Q4 / 2019
	Create dashboard reports by program by select demographics	Q1 /2018	Q4 / 2019
	Incorporate the EHR Incentive Program into the Department's Enterprise Data Governance Umbrella	Q1 /2018	Q2 / 2018
	Demonstrate reuse of Health IT tools beyond EHR Incentive Program	Q1 /2017	Ongoing

Section 7: Proposed Budget

The funding requested is for HIT activities beginning October 1, 2017 through September 30, 2019.

Table 8: Budget

	FFY 2018			FFY 2019		
State Cost Category	**90% Federal Share**	**10% State Share**	**Total**	**90% Federal Share**	**10% State Share**	**Total**
State Personnel including benefits (from Table 5)	$517,535	$57,504	$575,039	$544,896	$60,544	$605,440
Travel (conferences and in-state mileage)	$22,500	$2,500	$25,000	$22,500	$2,500	$25,000
State Hardware/Software*	$887,580	$98,620	$986,200	$883,080	$98,120	$981,200
Equipment, Supplies and Hosting (BEST)**	$382,500	$42,500	$425,000	$180,000	$20,000	$200,000
HITECH - Contractor Costs (from Table 6)	$3,968,982	$440,998	$4,409,980	$4,550,724	$505,636	$5,056,360
Sub-Total (HITECH)	**$5,779,097**	**$642,122**	**$6,421,219**	**$6,181,200**	**$686,800**	**$6,868,000**
MMIS - Contractor Costs (from App. A)	$464,839	$51,649	$516,488	$464,839	$51,649	$516,488
Grand Total (HITECH & MMIS)	**$6,243,936**	**$693,771**	**$6,937,707**	**$6,646,039**	**$738,449**	**$7,384,488**

**Hardware/ Software -*

The state will incur cost for acquiring and maintain hardware, software, and licenses associated with various projects

***Equipment and Supplies*

The State will incur expenses for the dedicated infrastructure to conduct program operations. This includes Bureau of Enterprise Systems Technology (BEST) server hosting fees.

Administrative Operations

The Department uses a federally approved Public Assistance Cost Allocation Plan, which includes estimated indirect costs of $26,000 per FTE per year. All administrative costs (both direct and indirect) are charged to federal awards by implementing the cost allocation plan. This is included in the State personnel cost.

The breakdown by quarters of the FFP is as follows:

Table 9: Federal Participation by quarter

Year/Quarter	Month	State Cost	Contractor Cost	Total
FFY 2018 Q1	Oct - Dec	$452,528.75	$992,245.50	$1,444,774.25
FFY 2018 Q2	Jan - Mar	$452,528.75	$992,245.50	$1,444,774.25
FFY 2018 Q3	Apr - Jun	$452,528.75	$992,245.50	$1,444,774.25
FFY 2018 Q4	July - Sep	$452,528.75	$992,245.50	$1,444,774.25
Total FFY 2018		**$1,810,115.00**	**$3,968,982.00**	**$5,779,097.00**
FFY 2019 Q1	Oct - Dec	$407,619.00	$1,137,681.00	$1,545,300.00
FFY 2019 Q2	Jan - Mar	$407,619.00	$1,137,681.00	$1,545,300.00
FFY 2019 Q3	Apr - Jun	$407,619.00	$1,137,681.00	$1,545,300.00
FFY 2019 Q4	July - Sep	$407,619.00	$1,137,681.00	$1,545,300.00
Total FFY 2019		**$1,630,476.00**	**$4,550,724.00**	**$6,181,200.00**

Section 8: Costs Allocation Plan for Implementation Activities

All HIT Projects outlined are Medicaid-related and thus no cost allocation is warranted.

Section 9: Assurances, Security, Interface Requirements, and Disaster Recovery Procedures

Table 12 indicates the Department of Social Services willingness to comply with the Code of Federal Regulation (CFR) and the State Medicaid Manual (SMM) Citations.

Table 10: Assurances

Standard	Yes	No	Explanation for any "No" responses.
Procurement Standards (Competition / Sole Source)			
42 CFR Part 495.348	X		
SMM Section 11267	X		
45 CFR Part 95.615	X		
45 CFR Part 92.36	X		
Access to Records, Reporting and Agency Attestations			
42 CFR Part 495.350	X		
42 CFR Part 495.352	X		
42 CFR Part 495.346	X		
42 CFR Part 433.112(b)(5) – (9)	X		
45 CFR Part 95.615	X		
SMM Section 11267	X		
Software & Ownership Rights, Federal Licenses, Information Safeguarding, HIPAA Compliance, and Progress Reports			
42 CFR Part 495.360	X		
45 CFR Part 95.617	X		
42 CFR Part 431.300	X		
42 CFR Part 433.112	X		
Security and interface requirements to be employed for all State HIT systems.			
45 CFR 164 Securities and Privacy	X		

Appendix A: MMIS Related Expenditures

This HIT IAPD requests approval of MMIS related expenditures totaling $1,032,976.96 ($994,679.26 FFP) for the period October 1, 2017-September 30, 2019. Table 13 indicates the total MMIS Related Expenditures by Federal Fiscal Year.

The Department's fiscal agent, HP Enterprise Services (HPE) has provided continuous operational support and customization of MAPIR within the MMIS.

Daily operations covered under the HPE contract include staffing for the EHR Incentive Program. HPE staff offer eligible professionals and hospitals general information about the program, technical assistance with the online application process, and status information. Two provider representatives have been dedicated to research and review provider issues, with call backs to providers as needed, escalation requests to the Department, and resolution of technical issues related to MAPIR.

The HPE team also provides ongoing customization of the core MAPIR which includes interfacing the core module with the MMIS provider, claim and payment systems. The core MAPIR application was implemented September, 2011 with functionality required for the first year of operation of the incentive payment program and the flexibility to be modified to accommodate multi-year processing and the reporting of Meaningful Use criteria as CMS refines the requirements through 2021. Listed below are the most recent and upcoming MAPIR releases:

- The core enhancement to support Modified Stage 2 attestations for Eligible Professionals in program years 2015 and 2016 was released to the states on March 25, 2016 for customization and was installed May 20, 2016.
- The core enhancement to support Modified Stage 2 attestations for Eligible Hospitals in program years 2015 and 2016 was released to the states on September 12, 2016 for customization and was installed October 28, 2016.
- A MAPIR update was implemented on December 30, 2016 to accommodate the 90-Day Meaningful Use period instituted for all 2016 and 2017 attestations, regardless of stage.
- Work on Stage 3 for Eligible Professionals and Eligible Hospitals began in August 2016.
- The next major release for Modified Stage 2 and Meaningful Use Stage 3 attestations for Eligible Professionals and Hospitals in program year 2017 is being designed and is expected to be released to the states in May, 2017 for a possible August, 2017 implementation.

Table 11: MMIS Related Expenditures

Cost Description	FFY 2018				FFY 2019				Total
	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	
MMIS Enhancements CORE MAPIR	$64,122.12	$64,122.12	$64,122.12	$64,122.12	$64,122.12	$64,122.12	$64,122.12	$64,122.12	**$512,976.96**
90% FFP for MMIS Enhancements CORE MAPIR	$57,709.91	$57,709.91	$57,709.91	$57,709.91	$57,709.91	$57,709.91	$57,709.91	$57,709.91	**$461,679.26**
MMIS Customization	$65,000.00	$65,000.00	$65,000.00	$65,000.00	$65,000.00	$65,000.00	$65,000.00	$65,000.00	**$520,000.00**
90% FFP MMIS Customization MAPIR	$58,500.00	$58,500.00	$58,500.00	$58,500.00	$58,500.00	$58,500.00	$58,500.00	$58,500.00	**$468,000.00**
TOTAL	***$129,122.12***	***$129,122.12***	***$129,122.12***	***$129,122.12***	***$129,122.12***	***$129,122.12***	***$129,122.12***	***$129,122.12***	$1,032,976.96
90% FFP TOTAL	***$116,209.91***	***$116,209.91***	***$116,209.91***	***$116,209.91***	***$116,209.91***	***$116,209.91***	***$116,209.91***	***$116,209.91***	$994,679.26

Appendix B: Medicaid Provider Incentive Payments

For federal fiscal year 2018, 800 Eligible Professionals and zero Eligible Hospitals are expected to receive Medicaid Incentive Payments (Eligible Hospitals have received their full Medicaid incentive payments under the State's EHR Program). For federal fiscal year 2019, 800 Eligible Professionals and zero Eligible Hospitals are expected to receive Medicaid Incentive Payments. Table 14 below identifies the fully historical Medicaid Incentive Payments made as of December, 2016 since Federal Fiscal Year 2013.

Table 12: Provider Incentive Payments

Eligible Providers		Eligible Hospitals	
Payment in FFY2013		**Payment in FFY2013**	
Total EPs paid in FFY2013	713	Total EHs paid in FFY2013	13
Quarter 1 (Actual)	$1,671,677	Quarter 1 (Actual)	$6,076,658
Quarter 2 (Actual)	$3,256,923	Quarter 2 (Actual)	$2,548,691
Quarter 3 (Actual)	$4,983,840	Quarter 3 (Actual)	$0
Quarter 4 (Actual)	$3,101,084	Quarter 4 (Actual)	$799,072
Actual Payment in FFY2013	**$13,013,524**	**Actual Payment in FFY2013**	**$9,424,421**
Total EPs paid in FFY2014	834	Total EHs paid in FFY2014	23
Quarter 1 (Actual)	$3,011,836	Quarter 1 (Actual)	$ 3,007,032.55
Quarter 2 (Actual)	$2,550,001	Quarter 2 (Actual)	$ 3,157,470.25
Quarter 3 (Actual)	$4,527,677	Quarter 3 (Actual)	$ 4,360,368.89
Quarter 4 (Actual)	$974,668	Quarter 4 (Actual)	$ -
Actual Payment in FFY2014	**$11,064,182**	***Estimated Payment in FFY2014***	***$ 10,524,871.69***
Payment in FFY2015		**Payment in FFY2015**	
Total EPs paid in FFY2015 (Actual)	378	Total EHs paid	12
Quarter 1(Actual)	$157,250	Quarter 1 (Actual)	$844,915.79
Quarter 2 (Actual)	$2,072,584	Quarter 2 (Actual)	$0.00
Quarter 3 (Actual)	$3,911,418	Quarter 3 (Actual)	$2,419,499.63
Quarter 4 (Actual)	$2,669,001	Quarter 4	$2,687,503.85
Actual Payment in FFY2015	***$8,810,253***	***Actual Payment in FFY2015***	***$5,951,919.27***
Payment in FFY2016		**Payment in FFY2016**	
Total EPs paid in FFY2016	561	Total EHs paid	5
Quarter 1 (Actual)	$1,578,170	Quarter 1	$578,700
Quarter 2 (Actual)	$1,250,920	Quarter 2	$578,700
Quarter 3 (Actual)	$2,167,505	Quarter 3	$578,700
Quarter 4 (Actual)	$2,365,837	Quarter 4	$578,700
Actual Payment in FFY2016	***$7,362,432***	***Actual Payment in FFY2016***	**$2,314,800**
Payment in FFY2017		**Payment in FFY2017**	
EPs returning for MU1 and MU2	850	Estimated EHs to be paid	4
Quarter 1 (Actual)	$2,788,001	Quarter 1 (Actual)	$1,410,826
Quarter 2	$2,500,000	Quarter 2	$2,981,463.74
Quarter 3	$2,500,000	Quarter 3	$851,847
Quarter 4	$1,700,000	Quarter 4	$0
Estimated Payment in FFY2017	*$9,488,001*	*Estimated Payment in FFY2017*	$5,244,137
Payment in FFY2018		**Payment in FFY2018**	
EPs returning for MU1 and MU2	800	Estimated EHs to be paid	0
Quarter 1	$1,700,000	Quarter 1	$0
Quarter 2	$1,700,000	Quarter 2	$0
Quarter 3	$1,700,000	Quarter 3	$0
Quarter 4	$1,700,000	Quarter 4	$0
Estimated Payment in FFY2018	*$6,800,000*	*Estimated Payment in FFY2018*	$0
Payment in FFY2019		**Payment in FFY2019**	
EPs returning for MU1 and MU2	800	Estimated EHs to be paid	0
Quarter 1	$1,700,000	Quarter 1	$0
Quarter 2	$1,700,000	Quarter 2	$0
Quarter 3	$1,700,000	Quarter 3	$0
Quarter 4	$1,700,000	Quarter 4	$0
Estimated Payment in FFY2019	*$6,800,000*	*Estimated Payment in FFY2019*	$0

Appendix C: Grants

There are currently no grants, state, or local funds or other funding sources that have been secured by the state that will request HITECH matching funds.

Appendix D: HIE

State Executive Summary: HIE Proposal

The State's vision aligns with the priorities of CMS and ONC through the adoption and effective use of health IT to support quality improvement. The following section requests additional planning dollars to further examine and assess the State, provider, hospital, and multi-payer readiness to participate in HIE utility services, including a statewide eCQM reporting and measurement solution. This request allows for additional HITECH-HIT planning activities to support the development of the statewide HIT/HIE plan to expand the state's health IT functionalities. This expansion will enable providers in Connecticut, as well as provider networks with multi-payer arrangements, to succeed in transformational value-based payment initiatives. It will enable them to participate in additional health information exchange services over time, including those that may be publicly or privately funded.

Planning dollars will also further define and establish components of the ONC developed technology stack, including functions related to governance, identity management and patient and provider attribution, policy and legal levers, business operations, consent management, and security mechanisms.

On May 4th 2017, CMS approved initial planning funding to support statewide HIT/E planning during FFY 2017 for $1,624,318 with an effective date of January 1st 2017. This current request builds on that initial request. The table below summarizes our current request for HIE planning

	HITECH-HIE(90%)		
Year	Fed	State	Total
FFY 2018	2,946,310	327,368	3,273,678
FFY 2019	1,529,381	169,931	1,699,312
Total			**4,972,990**

State HIE Summary

As part of the State's strategy, the Health Information Technology Officer (HITO), with the support of the Lieutenant Governor and the statewide Health Information Technology Advisory Council (Council), initiated a stakeholder engagement process and conducted an environmental scan to synthesize the "current state" and the "desired future state" for HIT and HIE services in the state. The environmental scan also included an assessment of needs and current availability of technology and an assessment of the readiness of providers and consumers to adopt and use services when developed under the direction of PA 16-77. Concurrently, an eCQM Design Group was chartered to identify and recommend objectives and the functional requirements of a shared, statewide health IT-enabled electronic quality measurement solution in the context of Alternative Payment Models (APMs). The environmental scan and the eCQM Design Group recommendations will further inform the planning process, the development of the

HIT/HIE strategy and the priority services the state will stand up. The planning process would also include planning for integration with Medicaid interoperability projects.

At this time, additional planning funds are requested to support the following activities:

Health Information Technology Project Management Office

The state requests funding for planning activities for the Health Information Technology Program Management Office (HIT PMO), which closely coordinates with Medicaid efforts underway and other public and private technology efforts to ensure a coordinated system. Activities include:

- Support internal capacity for the HITO, staff and HIT consultative services
- Coordinate with Medicaid, the Office of the State Comptroller's, and other state and private efforts to support the State's priorities to accelerate the development and use of key HIE utilities such as an electronic clinical quality measurement solution[1], components of the technology stack and to identify additional health IT needs and priorities that will emerge from the 2017 stakeholder engagement and environmental scan.
- Communication and Outreach - The HITO, with support from contractors, will lead an outreach and engagement process to determine technical, operational and administrative requirements for statewide HIT utilities. Activities include:
    - Develop a multi-pronged communication and outreach strategy to create an outreach and feedback mechanism for providers, consumers and community-based organizations to ensure investments are supporting improved care, patient experience, and care coordination. The HITO will be responsible for determining the outreach and communication strategy with support from in-house and contractor support. Strategies may include community forums, an information distribution platform, and an interactive website.
    - Lead a statewide education campaign to inform the healthcare community, employers, consumers, and others on the state's plan to provide a secure reliable infrastructure to allow electronic exchange of health information between providers and patients. The focus will be on the value of more complete, timely information to support better patient care, improved health outcomes, and lower cost trends.
- Conduct additional one-on-one outreach and conversations with health plans, large health systems, large self-insured employers, and provider associations around the value propositions of an enabling health IT infrastructure for health transformation, and the potential return on investment for deploying modular HIT services for the exchange

[1] Since 2014, Medicaid has a eCQM solution in place that uses the popHealth OSEHRA solution and met the 2015 certification requirements in March 2017.

of health information through a State-wide governance model for a network of networks.

- Facilitate the Health IT Advisory Council and various design and work groups with subject matter and technical experts

Technical Assistance

Further technical assistance services are requested for subject matter expertise provided by the University of Connecticut Health Center (UCONN Health) and the HIT PMO contractor to obtain strategic consulting services related to planning, facilitation, stakeholder communication, and subject matter and technical expertise.

- The 2017 stakeholder engagement and environmental scan will capture strategic insights regarding specific needs, interests, expectations and concerns of the state stakeholders and identify opportunities where the state can build sustainable services and/or policies that would support these services. Top three to five 'Calls to Action' will be identified and further action will be taken to adopt appropriate policies to govern and implement these actions via design groups and other strategies.
- Develop a statewide HIT/HIE plan that includes strategies to support a business and technical model, operational requirements and sustainability plan. As part of this plan, it will prioritize HIE services, and develop use cases based on ranking, clinical value, prevalence, stakeholder interest and existing technical standards to support its development. The statewide plan will be informed by the stakeholder engagement process and environmental scan.
- Develop a Request for Proposal (RFP) for vendor bids for HIE Management Services to support the aforementioned 'Calls to Actions.'
    - Work with state stakeholders, including, but not limited to Medicaid, SIM, Council members, state agencies, healthcare community and payers to determine appropriate use of existing or recently acquired health IT investments in the state, where appropriate.
    - Determine where fair-share contributions may be needed to support implementation, as well operations of the services to support the exchange of information, where appropriate.
    - Develop cost allocation methodologies for multi-payer participation in operations, where appropriate.
- Deployment Strategy – develop a strategy to group projects into three phases – deploy, test and production. Each phase will deliver specific functionality and will be the basis for building additional functionality of later use case implementations.
- Facilitate the Health IT Advisory Council and various workgroups.

The requested 90/10 HITECH funding can accelerate the necessary infrastructure development,

and identify and utilize financial economies, where viable.

HIE Sustainability Approach

Public Act 66-77 designates the HITO as having authority over the State-wide Health Information Exchange. The HITO will coordinate and connect the State's HIT initiatives where applicable. Activities include:

- Conduct an environmental scan to identify current HIT activities occurring in the State, identify gaps and develop priorities for the State to mitigate the risk of deploying duplicative services.
- Develop a Statewide HIT/HIE strategic plan.
- Build a coordinated infrastructure to facilitate health information exchange.
- Develop the State HIT/ HIE governance and operational structure based on business and financial sustainability models

During the early portion of Federal Fiscal Year 2018 (FFY 18), the HITO with the support of the Advisory Council, stakeholders and consultants will develop a Statewide HIE strategic plan for the state. A portion of this document will focus on a sustainability model. Once finalized and approved, the statewide HIT/HIE plan will provide the backbone for future public and private funding.

Agency Participation in the HIE

The State's HIT strategy, through the establishment of the Health Information Technology Officer (HITO) under Connecticut's Public Act 16-77 (P.A. 16-77) enables the State HITO to coordinate with Medicaid and other State and private partners to strengthen the State and federal efforts to accelerate the adoption of health information technology, promote health information exchange and encourage the utilization of certified EHRs.
As of this date, Connecticut has not finalized the optimal funding allocation strategy for activities related to a health information exchange. As we finalize the state HIE plan, Connecticut will update its HIE IAPD request.

Project Budget

Connecticut is requesting $4,972,990 of HITECH funds which includes $4,475,691 (90% Federal Share) and $497,299 (10% State Share) to support the additional planning needs that support Medicaid and multi-payer participation in HIE solutions beginning October 2017 to September 2019. It is anticipated that an APD update will be submitted once a HIT/ HIE strategic plan is developed and embraced by stakeholders.

State Personnel
$1,681,932 total computable ($1,513,739 Federal Share at 90% FFP):
The Health Information Technology Officer (HITO) and the HIT Project Management Office (HIT PMO), through legislation, will oversee a variety of statewide HIT initiatives. Please note the following entities are state agencies: The University of Connecticut Health Center (UCONN

Health), and Office of the Healthcare Advocate (OHA). Additionally, the HITO, HIT PMO and SIM PMO are located within the OHA for administrative purposes. State personnel expenses include wages and fringe payments.

Travel
$36,336 total computable ($32,702 Federal Share at 90% FFP):
State will incur travel costs to national and regional conferences, as well as incur mileage costs for in-state travel related to planning and programmatic activities.

Hardware/Software/Licensing
N/A

Equipment and Supplies
$8,000 total computable ($7,200 Federal Share at 90% FFP):
State will incur costs for the purchase of standard office materials and supplies for Program staff to carry-out planning activities.

Contractors/Contracted Services
$2,753,834 total computable ($2,478,451 Federal Share at 90% FFP):
The State has engaged a contractor for the planning, facilitation and guidance of the Health IT Advisory Council, development of the statewide HIT/HIE Plan that includes business and technical models, operational and functional requirements and a deployment and sustainability strategy. Additionally, the contracted services will provide additional HIT planning consulting services for the development and execution of an RFP solicitation and evaluation process, creation and implementation of a communication and education campaign, subject matter expertise, and additional consulting services.

Indirect Costs
$492,888 total computable ($443,599 Federal Share at 90% FFP):
OHA has a negotiated Indirect Cost Rate of 10%. UCONN Health has a negotiated Facilities and Administrative Agreement (F&A Agreement) rate of 20% for these activities.

Total Proposed Budget

The proposed budget tables below lists the administrative and contracted costs required to support the statewide HIE activities for FFY 18-19 in its totality and by fiscal quarters.

Table 13: Total Proposed Budget Cost, Federal and Non-Federal Shares

State Cost Category	FFY 2018			FFY 2019		
	90% Federal Share	10% State Share	Total	90% Federal Share	10% State Share	Total
OHA Proposed Budget						
OHA Personnel*	$551,745	$61,305	**$613,050**	$568,297	$63,144	**$631,442**
Travel (includes conferences and in-state mileage)	$11,700	$1,300	**$13,000**	$11,700	$1,300	**$13,000**
Hardware/Software/Licensing	$0	$0	**$0**	$0	$0	**$0**
Equipment and Supplies	$4,500	$500	**$5,000**	$1,800	$200	**$2,000**
Contracts**	$1,893,384	$210,376	**$2,103,760**	$585,067	$65,007	**$650,074**
Total Direct Costs	$2,461,329	$273,481	**$2,734,810**	$1,166,864	$129,652	**$1,296,516**
Indirect Costs	$246,133	$27,348	**$273,481**	$116,686	$12,965	**$129,652**
OHA Proposed Budget	$2,707,462	$300,829	$3,008,291	$1,283,550	$142,617	$1,426,167

State Cost Category	FFY 2018			FFY 2019		
	90% Federal Share	10% State Share	Total	90% Federal Share	10% State Share	Total
UCHC Proposed Budget						
UCHC Personnel*	$193,939	$21,549	$215,488	$199,757	$22,195	$221,953
Travel (includes conferences and in-state mileage)	$4,651	$517	**$5,168**	$4,651	$517	**$5,168**
Hardware/Software/Licensing	$0	$0	**$0**	$0	$0	**$0**
Equipment and Supplies	$450	$50	**$500**	$450	$50	**$500**
Contracts**	$0	$0	$0	$0	$0	$0
Total Direct Costs	$199,040	$22,116	$221,156	$204,859	$22,762	$227,621
Indirect Costs	$39,808	$4,423	**$44,231**	$40,972	$4,552	**$45,524**
UCHC TOTAL Proposed Budget	$238,848	$26,539	$265,387	$245,830	$27,314	$273,145
OHA TOTAL Budget	**$2,946,310**	**$327,368**	**$3,273,678**	**$1,529,381**	**$169,931**	**$1,699,312**

** the contracts will be submitted for CMS approval prior to execution

Total Proposed Budget Costs by Fiscal Quarters

Table 14: Total Proposed Budget Costs by Fiscal Quarters

Year/Quarter	Month	State Cost	Contractor Cost	Total
FFY 2018 Q1	Oct - Dec	$ 292,479.50	$ 525,940.00	$ 818,419.50
FFY 2018 Q2	Jan - Mar	$ 292,479.50	$ 525,940.00	$ 818,419.50
FFY 2018 Q3	Apr - Jun	$ 292,479.50	$ 525,940.00	$ 818,419.50
FFY 2018 Q4	July - Sep	$ 292,479.50	$ 525,940.00	$ 818,419.50
Total FFY 2018		**$1,169,918.00**	**$2,103,760.00**	**$3,273,678.00**
FFY 2019 Q1	Oct - Dec	$ 262,309.50	$ 162,518.50	$ 424,828.00
FFY 2019 Q2	Jan - Mar	$ 262,309.50	$ 162,518.50	$ 424,828.00
FFY 2019 Q3	Apr - Jun	$ 262,309.50	$ 162,518.50	$ 424,828.00
FFY 2019 Q4	July - Sep	$ 262,309.50	$ 162,518.50	$ 424,828.00
Total FFY 2019		**$1,049,238.00**	**$ 650,074.00**	**$1,699,312.00**

Project Milestones and Schedule and Project Benchmarks

Project Activity	Start Date	End Date
Facilitate Health IT Advisory Council and various work groups	**01/01/17**	**09/30/19**
Conduct large scale multi-stakeholder engagement process	01/01/17	04/30/17
Conduct environmental scan to determine 'current' and 'desired' state	01/01/17	04/30/17
Deliver environmental scan results and recommendations to HITO and the Health IT Advisory Council	04/01/17	04/30/17
Convene eCQM Design Group	**02/01/17**	**04/30/17**
Deliver eCQM Design Group recommendations to HITO and the Health IT Advisory Council	04/01/17	04/30/17
Develop and plan statewide eCQM service	04/01/17	09/30/17
Deploy statewide eCQM service	10/01/17	09/30/18
Develop and Implement Statewide HIT/HIE plan	**05/01/17**	**09/30/19**
Identify 3-5 actionable priorities from environmental scan and convene workgroups	05/01/17	05/30/18
Begin and implement communications and outreach plan/campaign	05/01/17	09/30/19
Begin and implement multi-prong education campaign	05/01/17	09/30/19
Submit an HIE IAPD-U	09/01/17	10/01/17
Develop Deployment Strategy	10/01/17	12/01/17
RFP and contract HIE Management Services/ Organization	10/01/17	9/30/18

Inter-Agency MOA

Please note that HIE planning activities outlined in Appendix D are being done under a interagency MOA between DSS and HITO.

The State of Connecticut has also appropriated SIM (OHA) state funds to support the state share (10%) of Appendix D for Federal Fiscal Year 2018-19 HIE Planning and no federal SIM funds will be utilized for any state share.

Cost Allocation

There is no cost allocation as these are planning activities.

Appendix E: Standards and Conditions

Connecticut is currently engaging in its MITA state self-assessment with completion date projected for May, 2017 (this self-assessment is an update from 2012). In addition to the required processes set forth by CMS, the assessment will provide a fully developed gap analysis and strategic roadmap to align the Department's business areas and processes. The roadmap will also support transition planning enabling the Department to use defined levels of business maturity to help shape the vision of the Medicaid enterprise. The requests in this HIT IAPD are aligned with both the 2012 and the current MITA current assessment underway, particularly as it relates to the MMIS MAPIR and the BISA solution.

Table 15: CT's MITA Standards and Conditions

Standard and Condition	Description of how CT Medicaid will meet these Standards and Conditions
1 - Modularity Standard	• MAPIR and Connecticut interChange MMIS utilize service oriented architecture • MAPIR interfaces with CMS Registration and Attestation system; standardized transactions are used. • Medicaid Provider Directory, Alerting, Direct Exchange and the Business intelligence are being implemented as separate modules
2 - MITA Condition	• Connecticut strives to adhere to the Seven Conditions and Standards as outlined in MITA 3.0 There is ongoing emphasis on continuous movement toward maturity. • Wherever practicable MITA principles are deployed in terms of business, technical, and architectural standards.
3 - Industry Standards Condition	• Connecticut is aligning with industry standards with respect to development and testing of systems supporting Medicaid HIT initiatives. • Connecticut already uses Direct Secure Messaging, through a contractual agreement with the health information service provider. • Currently Connecticut's EHR Incentive program is engaged in: o Aligning to the MITA 3.0 principles by utilizing common industry standards whenever available. o Providing web-based access and integration. o Supporting MITA business process maturity to level 3 or 4.
4 - Leverage Condition	• MAPIR is leveraged via multi-state collaborative for AIU & MU Eligibility, Verification and Attestation. • As new systems are developed the State actively strives to assess components and solutions that have high applicability for reuse within the State and by other states. • Open-source, cloud-based, and commercial products will be utilized where practicable. • Customization will be avoided and minimized wherever possible. As an example the MAPIR application is highly configurable. • Medicaid Provider Directory, Alerting, Direct Exchange and the Business intelligence leverage existing assets and COTS products.
5 - Business Results Condition	• MAPIR provides a modern, self-service interface for providers requesting incentive payments. A secure web portal is utilized; user-friendly instructions, splash pages and hover bubbles are provided; and intelligent field edits facilitate the attestation

	process. • The State seeks to improve abilities for the analysis and reporting of enterprise information in a timely and accurate manner to providers, recipients and the public. The application data within MAPIR can be placed in a state's data repository. As Meaningful Use continues to evolve, the State, in conjunction with the MAPIR collaborative, will determine the most appropriate use of the MAPIR system in capturing data that is useful for reporting purposes and measuring business results. • Medicaid Provider Directory, Alerting, Direct Exchange and the Business intelligence will benefit the Department's goal of better outcomes.
6 – Reporting Condition	• Connecticut strives to develop and maintain appropriate reports to contribute to program evaluation, continuous improvement in business operations, and transparency and accountability • Connecticut's Medicaid EHR Incentive Program maintains a reporting environment with a wide range of management reports available to program staff and for use in federal reporting. • Medicaid Provider Directory, Alerting, Direct Exchange and the Business intelligence solution will provide all necessary reports
7 - Interoperability Condition	• Connecticut's approach will ensure seamless interoperability between systems, both existing and those to be developed, including any statewide HIT/E efforts. Connecticut will ensure interoperability by continuing to adhere to standards based protocols and architectures for all projects outlined in this IAPD.