

STATE OF MAINE

State of Maine Office of the State Coordinator for Health Information Technology Program Evaluation Plan

Prepared for:

Office of the National Coordinator for Health Information Technology

Center for Medicare and Medicaid Services

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1. Introduction

In April 2011, the State of Maine was awarded \$3,423,129 by the Office of the National Coordinator for Health Information Technology (ONC)'s State Health Information Exchange Cooperative Agreement Program.¹ The purpose of this award is to develop, implement and facilitate health information technology (HIT) and health information exchange (HIE) in the state of Maine. The Maine program is housed in the Office of the State Coordinator for HIT in the Office of MaineCare Services under the Maine Department of Health and Human Services, which is the sponsor of this program. The program's efforts to advance

¹ The April 2011 grant award replaced an earlier grant award that established the Health Information Exchange Program in Maine.

HIE are carried out in the context of a Statewide HIT Plan approved by the ONC and State policies and laws. The primary purpose of the program is to support the federal/state partnership HITECH vision:

A Nation in which the health and well-being of individuals and communities are improved by health information technology.

Maine’s Office of the State Coordinator for HIT, housed in the Department of health and Human Services leads the State’s HIT/HIE efforts and MaineCare’s Meaningful Use Program for health care providers. Maine’s statewide HIT strategy encompasses the following ideal:

Preserving and improving the health of Maine people requires a transformed patient centered health system that uses highly secure, integrated electronic health information systems to advance access, safety, quality, and cost efficiency in the care of individual patients and populations.

Maine’s Department of Health and Human Services has adopted a vision and mission:

Vision: Maine people living safe, healthy, and productive lives
Mission: Provide integrated health and human services to the people of Maine to assist individuals in meeting their needs, while respecting the rights and preferences of the individual and family, within available resources.

Maine’s Medicaid Meaningful Use Program, under the Office of the State Coordinator for HIT has a vision that reflects the national and State HIT goals:

A Medicaid program that employs secure electronic health information technology to provide truly integrated, efficient, and high quality health care to Members and to improve health outcomes.

Services performed by the OSC programs facilitate the secure exchange of health information between Maine health care organizations, providers, public health agencies and consumers according to nationally-recognized standards. Because the Medicaid Meaningful Use program is under the umbrella of the Office of the State Coordinator, it is important to assess both the HIT program and the Meaningful Use program in the context of this evaluation, as they chart the path forward for the future and an updated State Health Plan. Key program milestones for the Office of the State Coordinator for Health Information Technology and the State’s Meaningful Use Program are identified in the table below:

Milestone	Date
Contracted services for a statewide HIE	February 2010
Created a Health Information Technology steering committee of providers, consumers, advocacy groups, private entities, government leaders, public agencies and other stakeholders	February 2010
Established framework for Medicaid Adopt, Implement, and Upgrade program and Meaningful Use program (Approval of Maine’s SMHP)	June 2010

Implemented the Medicaid Meaningful Use program	June 2011
Conducted annual updates to program strategic plan	May 2011, May 2012
Approved Meaningful Use Implementation Plan Update (IAPD-U)	April 2013 (through September 2015)
Submitted program evaluation plan for approval	June 2013

2. Program Description

The Office of the State Coordinator for Health Information Technology, which has program oversight of the State’s Medicaid Meaningful Use program, serves as the foundation for Maine’s HIT initiatives. This section provides the evaluation framework describing context, processes and outcomes:

Context	
Priorities <i>(ONC required and state specific)</i>	Inputs <i>(primary or key)</i>
<ul style="list-style-type: none"> • Laboratories participating in delivering electronic structured laboratory results • Pharmacies participating in electronic prescribing • Providers sharing electronic patient care summaries • Usage of HIE Implementation Metrics • Governance • Technical Infrastructure • Business and Technical Options • Legal / Policy • Finance & Grant Management • Leveraging Funding • Meaningful Use Stage 2 and Stage 3 requirements (when known) • Integration with Payment Reform and Emerging health care initiatives and ONC/CMS priorities and policies • Sustainable Program 	<ul style="list-style-type: none"> • <i>Stakeholder Input (Maine Regional Extension Center, Legislature, HIT Steering Committee, State HIE, OMS Meaningful Use Program, HITSC)</i> • <i>Strategic and operational plans</i> • <i>Legislative and executive support</i> • <i>Federal grant funding</i> • <i>ONC guidance</i> • <i>CMS guidance</i> • <i>Nationally known Quality Programs and Metrics</i> • <i>Maine DHHS and State Leadership</i>
Process and Outcomes	
Strategies <i>(key approaches of program)</i>	Outcomes <i>(short- and long-term results)</i>
<ul style="list-style-type: none"> • <i>Active stakeholder engagement</i> • <i>HIE and OSC planning and implementation</i> • <i>Supporting Laboratories / pharmacies / providers</i> • <i>Assure privacy and security of information</i> 	<ul style="list-style-type: none"> • <i>Adoption-related outcomes (priority areas at minimum)</i> • <i>Cost, quality and health outcomes (e.g., triple aim)</i> • <i>Sustainability and Governance</i>

3. Evaluation Stakeholders

Evaluation stakeholders are individuals or organizations that have a vested interest in the evaluation. Although often referred to as “stakeholders,” subgroups of these individuals may actually have very different types of interests in the evaluation performed. The primary stakeholders for this evaluation include:

- Leadership and management of the Office of the State Coordinator for Health Information Technology and the State’s Meaningful Use Program
- Maine Legislators and Executives
- Office of the National Coordinator leadership and management
- Individual Consumers and Consumer Groups
- Membership of HITSC (State Agencies, Private and Public Stakeholders, and HealthInfoNet)
- Maine DHHS (leaders of initiatives such as value-based purchasing, SIM, rural health, telemedicine (TCL technology) and health homes)
- Maine CDC
- Maine Health Data Org
- Medicaid Agency
- Broadband Agency
- Maine’s IT Office
- Maine’s Mental Health Agency
- Maine’s Long Term Care Agency
- Maine’s CHIPRA Program
- Maine’s HIE
- SIM Project and Health Homes Initiative

The evaluation team will work directly with these stakeholders to finalize the evaluation plan by including them in discussions about what information will be most useful to them in taking actions to advance HIE and improve the Office of the State Coordinator for Health Information Technology and the State’s Meaningful Use Program, reviewing proposed data collection and analysis methodologies, and developing an approach for the dissemination of findings and recommendations.

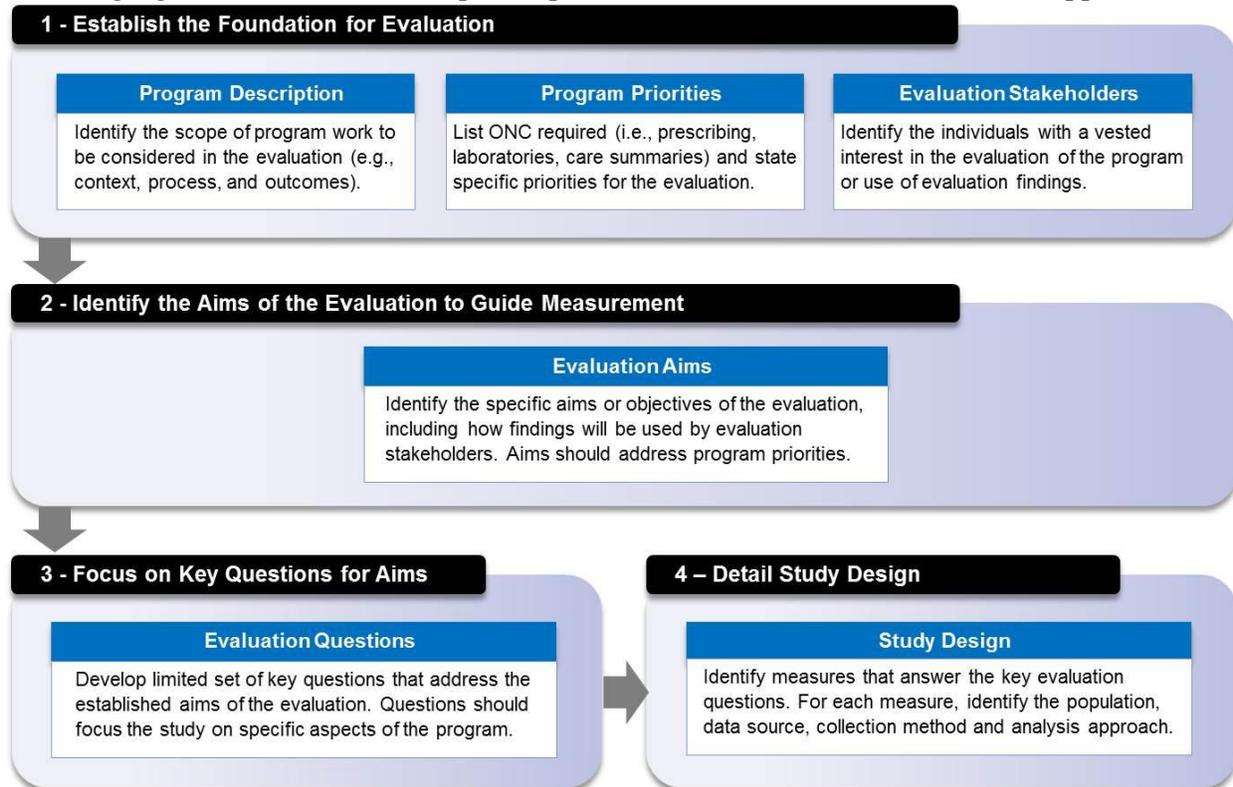
4. Aims of the Evaluation

For this activity, evaluation is defined as the collection of information about the context, processes and outcomes of the program to assess the program, improve program effectiveness, and inform programmatic decisions within Maine and by ONC. The primary aims of the evaluation are the following:

- Identify approaches and strategies used to facilitate and expand HIE in priority areas
- Describe conditions influencing implementation of program strategies
- Assess how HIE performance has progressed in key program priority areas
- Assess how key approaches and strategies contributed to progress
- Identify and document lessons learned and gap analysis
- Develop a plan for sustainability with ongoing milestones

5. Overall Approach

To establish a systematic approach for the evaluation plan, we provide a clear explanation of what our evaluation is intended to measure, how evaluation questions align to evaluation aims, and whether evaluation questions provide the information required by key stakeholders. The following figure illustrates these steps and presents an overview of our evaluation approach.



6. Evaluation Questions

Evaluation questions help to define the boundaries for an evaluation study by specifically delineating the aspects of the program on which the evaluation will focus. The evaluation will use a mixed methods approach to assessing evaluation aims. Evaluation plan questions address both process and outcome components of the program description. The following table identifies evaluation questions for each evaluation aim identified in Section 4. Additional information on data collection and analysis follows.

This evaluation consists of several components: 1) Evaluation of the HIE (to include the Cooperative Agreement executed between the State of Maine and HealthInfoNet that operates the State-wide HIE); 2) Evaluation of the State’s OSC and State HIT Plan; and 3) Lessons learned and a road-map for sustaining and integrating HIT in to the framework of policies and practices (Updated HIT Plan).

Focus	Evaluation Question
AIM 1:	Identify approaches and strategies that were used to facilitate and expand HIE in priority areas

Focus	Evaluation Question
Strategies	What approaches and strategies were used to sign up exchange users and how successful were these approaches?
AIM 2: Describe conditions influencing implementation of program strategies	
Governance	To what extent did the governance model for HIE promote or hinder program strategies? What improvements can be made to the governance of the HIE to promote the exchange of clinical data for treatment, payment, and health care operations and a “level playing field”? How are the importance of public purposes and public interest as reflected by the OSC and State HIT Plans, incorporated and reflected in the HIE governance model? What improvements in the OSC and State HIT Plan models best meet the needs of the State for the next four years and beyond?
Survey	To what extent did communications and outreach practices influence key stakeholder engagement? (distinguish between the provider community and the consuming public) How can the State HIT Plan and OSC program better promote coordination of communications and stakeholder engagement among various consumer, advocacy, HIE, and other health care related groups and organizations?
Resources	What are stakeholder perceptions of the adequacy of resources to support HIE implementation, the OSC program, and HIT efforts? What resources are available that have not been leveraged or could be leveraged in a more productive manner? How successful has the State OSC and HIE been in building a framework that readily lends itself to identifying opportunities for grants and other types of funding?
AIM 3: Assess how HIE performance has progressed in key program priority areas	
Adoption	How has HIE performance progressed toward adoption in each of the key program priority areas?
Sustainability	To what extent has progress been demonstrated in the implementation of the sustainability plan?
Utilization	What are the barriers to utilization? Is there a significant difference between HIE adoption and HIE usage? Is HIE participation hampered by lack of technology? The costs of participating in the HIE? How do all consumers who want to have their health care data in the HIE, ensure their health care data is in the HIE, especially those in the rural areas? Are there policies or frameworks that prevent treatment providers, payers, and operations from obtaining clinical data, especially PHI?
AIM 4: Assess how key approaches and strategies contributed to progress and identify lessons learned	
Elements of success	In what ways did program strategies contribute to successful progress in program priorities?
Lessons learned	What lessons has the program learned that are relevant to future efforts to advance the exchange of health information? How can those lessons be applied to the HIE, and the OSC and State HIT Plan going forward?
AIM 5: Assess path to sustainability and Develop Updated State HIT Plan	
Sustainability	How does accumulated knowledge from the evaluation process chart a course for program future, including an updated State HIT Plan? What actions should be taken and included in the updated State HIT Plan in recognition of the further integration of the OSC and the Meaningful Use Program? What are the actions and emerging initiatives that help inform and shape the updated State HIT Plan, and how is HIT best integrated with those initiatives to ensure efficiency, and Triple Aim goals are met?

7. Study Design

To address the established aims of the evaluation and related evaluation questions, multiple data collection and analysis methods will be used. The following table details the primary approach to data collection and analysis. Descriptions of methods for collection and analysis follow.

Evaluation Question	Study Population	Data Source	Data Collection	Data Analysis	
What approaches and strategies were used to sign up exchange users?	<ul style="list-style-type: none"> Maine HIE Program 	<ul style="list-style-type: none"> Program documentation 	<ul style="list-style-type: none"> Document Review 	<ul style="list-style-type: none"> Data extraction 	<ul style="list-style-type: none"> AIM 1
To what extent did the governance model for HIE promote or hinder program strategies?	<ul style="list-style-type: none"> Evaluation stakeholders Key HIE stakeholders 	<ul style="list-style-type: none"> Sample of stakeholder groups 	<ul style="list-style-type: none"> Interviews Focus groups 	<ul style="list-style-type: none"> Content analysis 	<ul style="list-style-type: none"> AIM 2
To what extent did communications and outreach practices influence key stakeholder engagement? (distinguish between the provider community and the consuming public)	<ul style="list-style-type: none"> Evaluation stakeholders Key HIE stakeholders 	<ul style="list-style-type: none"> Sample of stakeholder groups 	<ul style="list-style-type: none"> Interviews Focus groups 	<ul style="list-style-type: none"> Content analysis 	<ul style="list-style-type: none"> AIM 2
What are stakeholder perceptions of the adequacy of resources to support HIE implementation?	<ul style="list-style-type: none"> Evaluation stakeholders Key HIE stakeholders 	<ul style="list-style-type: none"> Sample of stakeholder groups 	<ul style="list-style-type: none"> Questionnaire 	<ul style="list-style-type: none"> Statistical analysis Content analysis 	<ul style="list-style-type: none"> AIM 2
How has HIE performance progressed toward adoption in each of the key program priority areas?	<ul style="list-style-type: none"> Laboratories 	<ul style="list-style-type: none"> Progress reports Audit log 	<ul style="list-style-type: none"> Secondary data 	<ul style="list-style-type: none"> Trend analysis Statistical analysis 	<ul style="list-style-type: none"> AIM 3
	<ul style="list-style-type: none"> Pharmacies 	<ul style="list-style-type: none"> Progress reports Vendor data 	<ul style="list-style-type: none"> Secondary data 		
	<ul style="list-style-type: none"> Providers 	<ul style="list-style-type: none"> Progress reports Sample of providers 	<ul style="list-style-type: none"> Secondary data Questionnaire 		
To what extent has progress been demonstrated in the implementation of the sustainability plan?	<ul style="list-style-type: none"> Maine HIE Program 	<ul style="list-style-type: none"> Program documentation 	<ul style="list-style-type: none"> Document Review 	<ul style="list-style-type: none"> Content analysis 	<ul style="list-style-type: none"> AIM 3
Is there a significant difference between HIE adoption and HIE usage?	<ul style="list-style-type: none"> Evaluation stakeholders Key HIE stakeholders 	<ul style="list-style-type: none"> Sample of stakeholder groups 	<ul style="list-style-type: none"> Interviews Focus groups 	<ul style="list-style-type: none"> Content analysis 	<ul style="list-style-type: none"> AIM 3
In what ways did program strategies contribute to successful progress in program priorities?	<ul style="list-style-type: none"> Evaluation stakeholders Key HIE stakeholders 	<ul style="list-style-type: none"> Sample of stakeholder groups 	<ul style="list-style-type: none"> Interviews Focus groups 	<ul style="list-style-type: none"> Content analysis 	<ul style="list-style-type: none"> AIM 4

Evaluation Question	Study Population	Data Source	Data Collection	Data Analysis	
What lessons, if any, did the program learn that are relevant to future efforts to advance the exchange of health information and HIE?	<ul style="list-style-type: none"> • Evaluation stakeholders • Key HIE stakeholders 	<ul style="list-style-type: none"> • Sample of stakeholder groups 	<ul style="list-style-type: none"> • Interviews • Focus groups 	<ul style="list-style-type: none"> • Content analysis 	<ul style="list-style-type: none"> • AIM 4
How will those lessons be incorporated into the program strategies, going forward?	<ul style="list-style-type: none"> • Evaluation stakeholders • Key HIE stakeholders 	<ul style="list-style-type: none"> • Sample of stakeholder groups 	<ul style="list-style-type: none"> • Interviews • Focus groups 	<ul style="list-style-type: none"> • Content analysis 	<ul style="list-style-type: none"> • AIM 4
How does accumulated knowledge from the evaluation process chart a course for program future? (Identify and recommend process and organizational improvements a develop a updated State OSC HIT Plan)	<ul style="list-style-type: none"> • Evaluation stakeholders • Key HIE stakeholders 	<ul style="list-style-type: none"> • Sample of stakeholder groups 	<ul style="list-style-type: none"> • Interviews • Focus groups • Questionnaire 	<ul style="list-style-type: none"> • Content analysis 	<ul style="list-style-type: none"> • AIM 5
As the Maine framework moves to more fully integrate its OSC and Meaningful Use programs, what actions should be taken to increase efficiency, integrate HIT into new emerging initiatives such as value-based purchasing, SIM, health homes)?	<ul style="list-style-type: none"> • Evaluation stakeholders • Key HIE stakeholders 	<ul style="list-style-type: none"> • Progress reports • Sample of providers 	<ul style="list-style-type: none"> • Secondary data • Questionnaire • Interviews • Focus groups 	<ul style="list-style-type: none"> • Content analysis 	<ul style="list-style-type: none"> • AIM 5

To select methods, we considered overall appropriateness to the program context (e.g., priorities) and feasibility given program constraints (e.g., resources). Each data collection method is outlined in the table below. Other data collection methods may be utilized as appropriate.

Data Collection Methods

Collection Method	Description
Document Review	The review of existing written documents, reports and other artifacts (e.g., progress reports) to collect data and information for analysis and interpretation.
Secondary Data	The analysis of existing data that was either gathered by another organization or individual or for some other purpose than the evaluation—or both (e.g., Surescripts e-prescribing data).
Interviews	The asking of questions orally to individuals, often in a format with standardized questions and open-ended responses. Closed-ended questions should have specific answers specified.
Focus Groups	A group interview of approximately six to twelve people who share similar characteristics or common interests. A facilitator guides the group based on a predetermined set of topics.
Questionnaires	A questionnaire is a set of questions for gathering information from individuals. Commonly administered as a survey, they may also be administered by mail, telephone, or as handouts.

Data Analysis Methods

Collection Method	Description
Data Extraction	The process of reviewing a data source to retrieve data and information of interest.
Content Analysis	A method for studying the content of a data source (e.g., document, transcript, survey response) to categorize information, often leading to conclusions about common themes, issues, processes or ideas expressed.
Trend Analysis	A method for analyzing the change over time of measures that are collected repeatedly. Trend analysis compares repeated measurements to increase awareness of change.
Statistical Analysis	A set of methods to analyze, present, and interpret data. Statistical analyses provide an approach to describe data and to make interpretations about the meaning of the data.

8. Dissemination of Findings and Recommendations

The evaluation team will determine stakeholders' preferred communication method and their specific needs regarding the format of findings and recommendations resulting from the evaluation. We anticipate developing the following products for the presentation of evaluation findings and recommendations:

- The final evaluation report audience will be the State of Maine Office of the State Coordinator, HITSC, state leaders and federal partners (ONC & CMS)
- A PowerPoint slide set of data and findings linked to sound recommendations for action
- Presentation of findings and recommendations at face-to-face stakeholder meetings
- Presentation of findings and recommendations through public webinar or press release

9. Timeline

The timeline below is based on achieving the evaluation before February 7th, 2014. The completion of evaluation activities depends on the progress of program activities, availability of data and timeliness of feedback from ONC on evaluation activities outlined within this plan.

Evaluation Activity	Completion Date
Approval of Evaluation plan by ONC	June 25, 2013
RFP (Competitive Process)	August 20, 2013
Execute Contract (Including Final Work Plan)	August 30, 2013
Data Gathering (Including Stakeholders Meetings and Input)	October 15, 2013
Data Analysis and Draft Findings	November 15, 2013
Draft Report	December 15, 2013

Comment Period	January 10, 2014
Final Report with Recommendations for Updated State HIT Plan	January 15, 2014
Final Presentation of Report to Sponsors	February 3, 2014

The state of Maine is committed to securing a well qualified vendor to conduct this important review and analysis of Maine’s program with the goal of applying the lessons learned to develop its OSC program goals and objectives and the upcoming next four year plan. Maine will continue to keep its federal partners, the ONC and the Medicaid Meaningful Use programs involved in the development, review, and planning for the next generation of Health Information Technology.