Commonwealth of Massachusetts
Executive Office of Health and Human Services

State Medicaid Health Information Technology Plan (SMHP)

March 11, 2011

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The MassHealth State Medicaid Health Information Technology Plan (SMHP) was developed with the support and cooperation from a project team comprised of staff from Executive Office of Health and Human Services, MassHealth Executive Team, MassHealth Operations, Massachusetts Department of Public Health, EOHHS Secretariat Information Technology Office, Division of Health Care Finance and Policy, Information Technology Division, Office of Clinical Affairs, EOHHS Financial Management Team, EOHHS Legal and Compliance Unit, CHIPRA Grant Director and Massachusetts eHealth Institute as well as a wide variety of internal and external stakeholders.

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The Executive Office of Health and Human Services
State Medicaid Health Information Technology Plan

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Introduction

This section of the State Medicaid Health Information Technology Plan (SMHP) provides an executive summary that describes what members, providers, and MassHealth can expect after successfully implementing the five-year HIT vision. Additionally, this section of the SMHP outlines key components of the plan, describes how the plan aligns with the SMHP template issued by CMS and identifies where key terms and abbreviations used throughout the document can be found.

Executive Summary

Background:

In 2006, Massachusetts pioneered the implementation of health care reform to increase access and coverage to quality, affordable health care to all citizens of the Commonwealth. In recognition of the critical role that Health Information Technology (HIT) could play in supporting health reform initiatives, the Massachusetts legislature enacted Chapter 305 in 2008, an Act to promote cost containment, transparency and efficiency in the delivery of quality health care. Chapter 305 recognized that HIT is a critical component to improve the delivery of health care services to its residents. Chapter 305 is consistent with the health information technology provisions of the American Recovery and Reinvestment Act (ARRA) referred to as the Health Information Technology for Economic and Clinical Health (HITECH) Act despite the fact that Chapter 305 preceded the enactment of HITECH.

MassHealth, part of the Executive Office of Health and Human Services, is the single state agency that administers the Massachusetts' Medicaid program. MassHealth provides healthcare benefits and premium assistance for low and medium income families, uninsured families, disabled individuals, children and individuals living in Massachusetts, including multiple waiver programs such as the Community Based waiver programs and the autism waiver program. In Massachusetts, Medicaid (Title XIX of the Social Security Act), the Children's Health Insurance Program (CHIP: Title XXI of the Social Security Act), CommonHealth (medical support for the disabled), Children's Medical Security Plan (CMSP) and other health benefit programs for specific populations are administered as one program: MassHealth.

MassHealth received approval from CMS of its HIT Planning Advanced Planning Document (PAPD) in May 2010. This approval allowed MassHealth to hire Berry, Dunn, McNeil and Parker through a competitive procurement process to assist in the development of its State Medicaid Health Information Technology Plan (SMHP). BerryDunn facilitated planning meetings, collaborated with State staff to gather specific operational processes, and assisted the State team to determine how the information would be presented in the SMHP to reflect how MassHealth will implement, operate, administer and oversee the Medicaid Electronic Health Record (EHR) Incentive Payment Program. MassHealth's goal is to launch its incentive program in the late summer of 2011.

Major Sections of the SMHP:

There are five primary sections of the SMHP:

1. **Section A: The State's "As-Is" HIT Landscape.** Section A provides an overview of the current landscape for Health Information Technology (HIT) in the Commonwealth of Massachusetts. It includes descriptions of key HIT initiatives within the Commonwealth

as well as various multi-state initiatives, the HIT governance structure, and a summary of a recently completed EHR provider survey.

2. **Section B: The State's "To-Be" Landscape.** Section B describes the vision for the future of HIT in the Commonwealth of Massachusetts. This includes an overview of how MassHealth and EOHHS will align to execute the Commonwealth 2010 HIT Strategic Plan and the 2010 HIE Strategic and Operational Plans, MassHealth's proposed governance model for the Medicaid EHR Incentive Payment Program, and identifies key goals and objectives that must be met to implement the agency's HIT vision by 2015.
3. **Section C: Activities Necessary to Administer the Incentive Program.** Section C describes the major business processes that will be utilized by MassHealth to administer the Medicaid EHR Incentive Payment Program. This includes processes to ensure that eligible professionals and hospitals have met federal and state statutory and regulatory requirements, to educate and inform providers about all aspects of the incentive program, to disburse and report incentive payments, and to govern the appeal of an eligibility or payment decision. Additionally, this section provides a description of the system that will interface with the CMS Registration and Attestation System (CMS R&A), accept provider attestations, and issue and report on payments referred to as the Medical Assistance Provider Incentive Payment Repository (MAPIR).
4. **Section D: The State's Audit Strategy.** Section D describes the actions MassHealth will undertake to avoid making improper payments within the Medicaid EHR Incentive Payment Program. These include methods for program monitoring, post-payment auditing, fraud and abuse prevention and detection, federal claiming and federal reporting.
5. **Section E: The State's HIT Roadmap.** Section E contains a roadmap that includes two major components: MassHealth's Operational Plan for implementing the Medicaid EHR Incentive Payment Program and the Five-Year Strategic Plan that identifies the major IT projects required to achieve the agency's HIT vision. This section also provides information on the additional staff resources required to implement and administer the Medicaid EHR Incentive Payment Program.

Section A (The State's "As-Is" HIT Landscape):

The State's "As-Is" HIT Landscape has been developed in accordance with the Centers for Medicare and Medicaid State Medicaid HIT Plan (SMHP) Overview document (OMB Approval Number 0938-1088). Additional requirements outlining necessary plan content for this Section were identified in the Final Rule[1]. Key areas of focus include understanding what MassHealth is doing today to assist providers and outreach to key stakeholder groups, understanding EHR adoption rates and proactively raising awareness of potential barriers to adoption and participation in the incentive payment program.

Chapter 305 of the Acts of 2008, an Act to Promote Cost Containment, Transparency and efficiency in the Delivery of Quality Health Care was signed into law by Governor Patrick in August 2008. It established the goal of state-wide implementation of EHR in all provider settings as part of an interoperable health information exchange by the end of 2014. Chapter 305 also provided $15 million in initial funding and established the Massachusetts eHealth Institute (MeHI) within the Massachusetts Technology Collaborative (MTC), and a nine member Health

[1] Department of Health and Human Services, Centers for Medicare & Medicaid Services, 42 CFR Parts 412, 413, 422 et al. Medicare and Medicaid Programs; Electronic Health Record Incentive Program; Final Rule.

Information Technology Council (HIT Council) that is chaired by Secretary of Health and Human Services.

In 2010, MeHI, as the state's designated entity, issued and received federal approval of the Commonwealth of Massachusetts Health Information Technology Strategic Plan and the Commonwealth of Massachusetts 2010 Health Information Exchange Strategic and Operational Plan. In developing Section A of the SMHP, MassHealth leveraged the existing research and documentation of these two strategic plans to complete relevant requirements of the CMS SMHP Template. In addition, Environmental Scan activities included outreach to over 60 internal and external stakeholders including numerous provider professional organizations and associations, including, but not limited to Indian Health Services (IHS), the Veterans Health Administration (VHA), the Massachusetts Medical Society (MMS), the Massachusetts Dental Society (MDS), the Massachusetts League of Community Health Centers (MLCHC), the Massachusetts Hospital Association (MHA), and the Massachusetts Coalition of Nurse Practitioners.

Overview of HIT Governance in Massachusetts

Health Information Technology Council (HIT Council)

The HIT Council's role, as described in Chapter 305, is to advise MeHI on the dissemination of health information technology across the Commonwealth, including the deployment of electronic health records systems in all health care provider settings that are networked through a statewide health information exchange. The HIT Council consists of nine members, including four representatives of governmental agencies and five representatives from the private sector. The governmental members of the HIT Council include the Secretary of Health and Human Services, who serves as the Council's chair; the Secretary of Administration and Finance, or a designee; the Executive Director of the Health Care Quality and Cost Council; the Director of the Office of Medicaid; 5 members appointed by the governor including an expert in health information technology, an expert in law and health policy, and an expert in health information privacy and security.

Massachusetts Technology Collaborative (MTC)

MTC is an independent development agency chartered by the Commonwealth to promote new economic opportunity and foster a more favorable environment for the formation, retention and expansion of technology-related enterprise in Massachusetts. MTC serves as a catalyst for growing the knowledge and technology-based industries that comprise the Commonwealth's Innovation Economy. MTC energizes emerging markets by filling gaps in the marketplace, connecting key stakeholders, conducting critical economic analyses and providing access to intellectual and financial capital. MTC operates four programmatic divisions that support economic growth and innovation and attempt to generate public benefits for Massachusetts citizens:

1. **The Massachusetts Broadband Institute:** Exists to extend affordable high-speed Internet access to all homes, businesses, schools, libraries, medical facilities, government offices and other public places across Massachusetts;
2. **Healthcare and Life Sciences Unit:** Assists the activities of Massachusetts's world-class universities, teaching hospitals and research institutions as well as the Commonwealth's biotechnology, medical device and pharmaceutical companies;

3. **John Adams Innovation Institute:** A public economic development agency that fosters a more favorable environment for the formation, retention, and expansion of technology-related enterprises in Massachusetts; and
4. **Massachusetts e-Health Institute:** Responsible for advancing the dissemination of health information technology across the Commonwealth, including the deployment of electronic health records systems in all healthcare provider settings that are networked through a statewide health information exchange.

Massachusetts eHealth Institute (MeHI)

Chapter 305 created MeHI as a non-divisible component of the MTC. It also created the Health Information Technology Council (HIT Council), chaired by the Secretary of Health and Human Services, to oversee MeHI's activities. MTC, acting through MeHI and the Council collectively, constitutes the single State entity responsible for coordinating and facilitating the dissemination of EHR systems throughout the Commonwealth. MeHI, working with the Council, was tasked with developing and implementing a statewide plan to carry out this objective. Chapter 305 also contains a mandate that the Massachusetts Department of Public Health (MDPH) and the Board of Registration in Medicine (BORIM) adopt regulations requiring the demonstration of competent use of EHR systems, as a condition of licensure for hospitals, community health centers and physicians.

MeHI is collaborating with the BORIM, MassHealth (Medicaid) and MDPH to ensure a consistent approach for meeting the needs of both Chapter 305 and the Meaningful Use requirements of the HITECH Act. MeHI's Director is appointed by MTC's Executive Director and is charged, under the Act, with preparing the Commonwealth's Health Information Technology Plan and Health Information Exchange Strategic and Operational Plan and their corresponding budgets for implementation. In addition, the MeHI director is the state's Health IT coordinator and is responsible for aligning the state's Health IT activities. MeHI operates under the guidance of both the MTC and the HIT Council and its chair, the Secretary of EOHHS. Additionally, the HIT Council approves the HIT Strategic Plan and the HIE Strategic and Operational Plan that are prepared by MeHI.

With approval from the HIT Council, MeHI also develops the various mechanisms for funding HIT through use of the state eHealth Fund. Grants awarded from the eHealth Fund are based on recommendations of the MeHI Director and are subject to the approval of MTC's Board and the HIT Council. In close consultation and collaboration with the Medicaid Office (MassHealth) and Executive Office of Health and Human Services Information Technology Office, the Act also charges MeHI to maximize federal Medicaid matching funds that may be available.

MeHI currently supports two separate and distinct programs and is proposing to support a third, the Enrollment, Validation and Outreach Team (MeHI/EVOT), that will carry-out incentive payment activities as described in Sections C and D of the SMHP. MeHI's programs are described in more detail below:

1. **Regional Extension Center Program (MeHI/REC):** The structure of this program is based on the use of Implementation and Optimization Organizations (IOOs) to provide implementation services to physicians. The IOOs are contractually obligated to provide the services to guarantee that providers achieve meaningful use. The MeHI/REC program provides oversight of the IOOs and EHR vendors to ensure conformance with state (including Chapter 305) and federal law in the statewide implementation of EHR.

MeHI/REC administers ONC "direct assistance" to priority primary care providers who meet federal grant guidelines;

2. **Health Information Exchange Program (MeHI/HIE):** The structure of this program is based on the use of a diverse group of public and private stakeholders to support a "network of networks" approach to a Statewide HIE. The MeHI/HIE role is to provide administration of the ONC Cooperative Agreement funds and to ensure the effective implementation of the Statewide HIE. MeHI/HIE will procure and contract with vendors to deploy and operate the Statewide HIE services; and
3. **The Medicaid EHR Incentive Payment Program Enrollment, Validation, and Outreach Team Program (MeHI/EVOT):** The structure of this program is based on a separate and distinct operational team that will support the Medicaid Incentive Payment Program through an agreement with EOHHS. The MeHI/EVOT role will be to provide incentive program enrollment, validation, and outreach support services to providers. MTC shall track and report on the MeHI/EVOT activities separately from the other MeHI activities. MTC shall use its accounting and financial systems for the MeHI/EVOT in a similar manner to its tracking for other programs, including federal grants. The financial systems shall segregate all revenues and expenditures associated with MassHealth and Incentive Program activities.

Business Functions to Support the Medicaid EHR Incentive Payment Program

The following diagram depicts the functional areas within MassHealth and MeHI/EVOT that will require existing and new staff resources in order to successfully implement and operationally support the Medicaid EHR Incentive Payment Program.

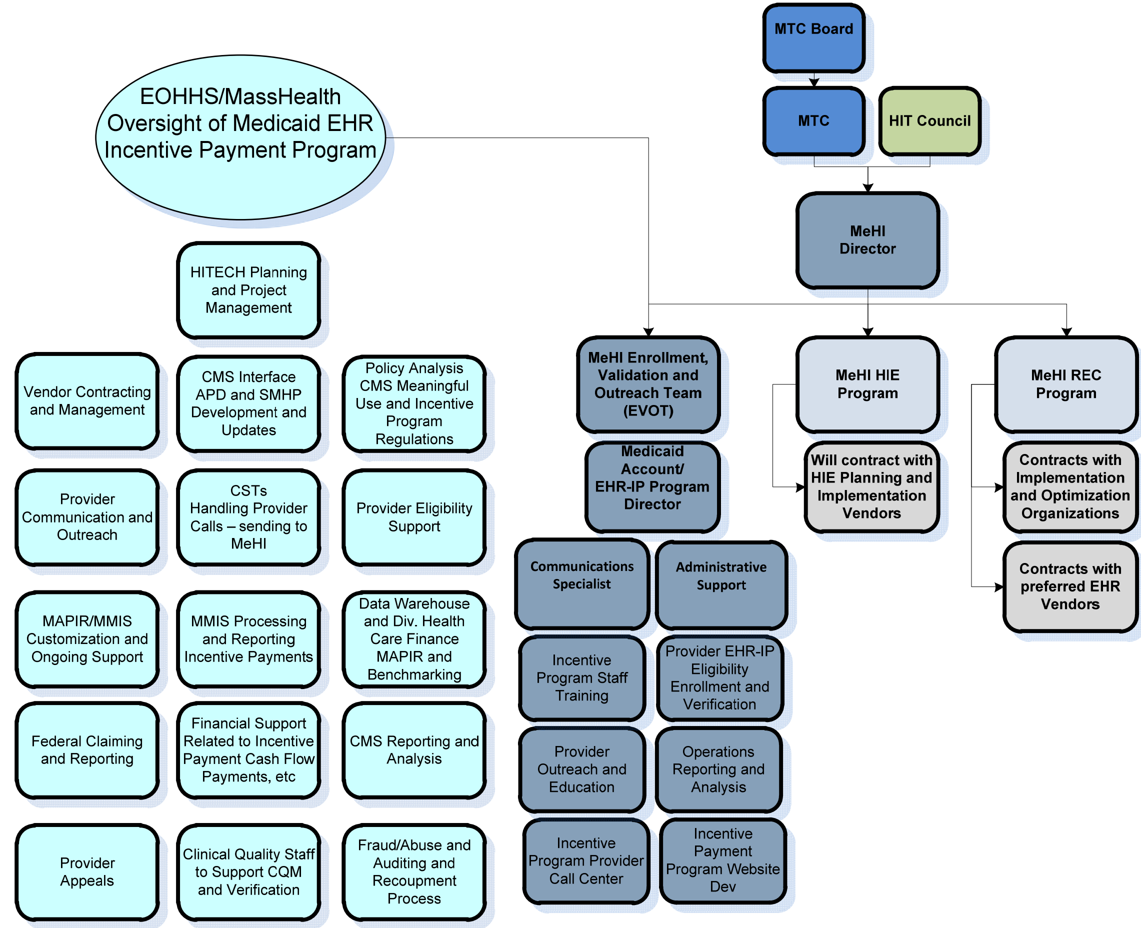


Diagram 1: Functional Responsibilities to Support the Medicaid EHR Incentive Payment Program

Collaboration with Other States

Medical Assistance Provider Incentive Repository (MAPIR) Multi-State Collaborative:

Massachusetts is participating in a multi-state collaborative which is led by the State of Pennsylvania's Office of Medical Assistance Programs (PA OMAP) to work with HP Enterprise Services to build a new incentive payment application that will support participating states' implementation and administration of the Medicaid EHR Incentive Payment Program. This system will interface with the CMS Registration and Attestation System (CMS R&A) and allow providers to complete program applications and, if approved, generate and report on EHR incentive payments. This application is known as the Medical Assistance Provider Incentive Repository (MAPIR).

In addition to Massachusetts, the Multi-State Collaboration currently includes: Arkansas, Connecticut, Delaware, Florida, Georgia, Indiana, Kansas, Oregon, Pennsylvania, Rhode Island, Wisconsin and Vermont. These states, for whom HP pays a primary role in operating and maintaining their MMIS, joined together in an effort to gain economies of scale in base system costs and assist HP in developing a core MAPIR product that would be customized to meet the needs of each participating State. Massachusetts-based customizations will begin after the May release of the core MAPIR product. The Pennsylvania IAPD was approved by CMS for the core MAPIR product in November 2010 on behalf of the 13 states within the collaborative. Massachusetts will include its costs of MAPIR integration, customization and change orders in an IAPD.

Key Environmental Scan Findings:

A provider-based survey was conducted by MTC/MeHI and MassHealth in the fall of 2010. The survey focused on the physician and dental provider population to gather information on the current state of HIT adoption and use of EHRs in provider offices across the state as well as obtain information on what the providers believe are barriers to EHR adoption and incentive payment program participation. Results obtained through the Provider EHR survey were discussed during follow-up interviews with provider organizations conducted in November and December 2010 as part of the SMHP planning process.

Key findings of the Provider EHR survey include:

- Levels of EHR adoption were different in the western and eastern geographic regions of the State;
- The survey results indicate that urban practices are more automated than smaller, rural practices. That is, the further away from Boston Central (Suffolk County) a provider is, the less likely they are to have the resources available to adopt an EHR system; western MA trails behind Suffolk County by 37% in terms of EHR adoption;
- 90% of Suffolk County (i.e., Boston) providers responded they are, "currently using EHR technology";
- A significant majority, more than three-in-four physicians, currently use computers to look up patient information. Dentists, however, are far less likely to use this technology;
- 86% of survey respondents reported they already have or are in the process of adopting EHR and 10% have plans to adopt the technology in the next few years;
- Physicians and dentists who currently use EHR systems are satisfied overall with their systems;
- Among dentists, 42% have no plans to adopt an EHR technology at this time;

- The most significant roadblocks to EHR adoption are financially driven. The number one response was that EHR adoption is “too expensive.” The second was that providers were, “not convinced of the return on investment”; and
- The most significant roadblock to the incentive program is lack of awareness. Dentists reported that before this survey 67% were “not at all” familiar with the Medicaid EHR Incentive Payment Program. 24% of doctors also reported they were not at all familiar with the program.

Key findings of the provider association meetings include:

- Providers reported that they lack confidence in EHRs to deliver a favorable return on their investment;
- Providers reported that they lack a general awareness of the Medicaid EHR Incentive Payment Program;
- Providers reported that they desire greater clarity on the availability of MassHealth to support the financial needs of its providers that are now mandated through Chapter 305 in order to have EHR in place by 2015; and
- Some Providers reported they prefer to receive information about the EHR Incentive Payment Program from associations in addition to other communication channels.

Section B (The State’s “To-Be” Landscape):

The Future of HIT in Massachusetts:

The future Vision for the SMHP is not only completely aligned with, but fits wholly, within the Vision described in the Commonwealth of Massachusetts Health Information Technology Plan and the Commonwealth of Massachusetts 2010 Health Information Exchange Strategic and Operational Plan, previously approved by ONC. The SMHP Vision for 2015 includes:

> “The MassHealth Vision is for a health care delivery system that produces the highest quality health care outcomes in the nation while containing costs.”
>
> “MassHealth envisions a more effective and efficient health care delivery system supported by fully interoperable health information supplied in a coordinated manner, at the point of care and in real-time.”
>
> “The MassHealth Vision assures the privacy and security of everyone’s health care information.”

The following graphic depicts the major technical, administrative, and clinical infrastructure components essential to effectively implement the provisions of the Affordable Care Act (ACA). These components include: required Health Insurance Exchange (HIX; Massachusetts already has the Connector authority as its HIX); Eligibility systems that interact efficiently and comprehensively with the HIX; HIEs that provide the pipeline for the movement of clinical information in real time; improvements in service approaches, client coordination, and reimbursement strategies; and enhanced quality reporting. Taken together, all of these components provide the opportunity for Massachusetts to transform its healthcare systems by implementing comprehensive and complementary new or enhanced systems, clinical and administrative processes, and quality reporting metrics.

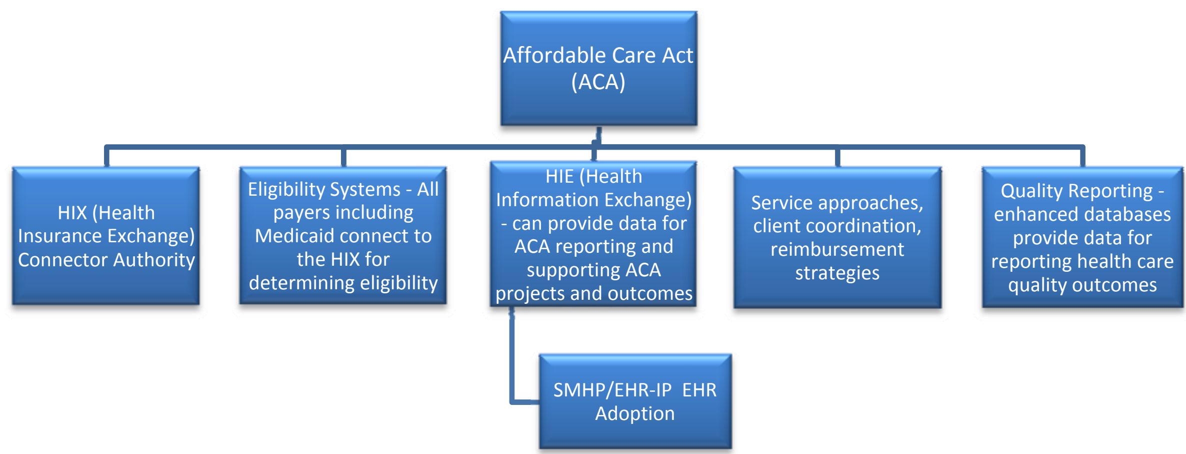


Diagram 2: Relationship between ACA and HIT Projects

As depicted above, the SMHP, particularly the Medicaid EHR Incentive Payment Program, is one, albeit important, component in the overall HIE Plan for the Commonwealth. In the end, success within the ACA context requires not just a successful proliferation of electronic health records, which the Medicaid EHR Incentive Payment Program is intended to assist Medicaid providers attain, but also the success of many other HIT, Clinical, and Administrative process improvements. Massachusetts recognizes the critical importance of moving forward not just one component, but the entire suite of ACA components. The MassHealth SMHP reflects this vision of coordinated implementation for many different initiatives which, as a whole, are intended to ultimately improve health outcomes for the entire population.

Goals and Objectives:

The SMHP Executive Team (comprised of EOHHS and MassHealth management, MeHI Management, EOHHS IT managers and the EOHHS Secretariat Chief Information Officer and Information Technology Team) collaboratively determined the goals and objectives for the SMHP and aligned them closely with existing strategies documented in the Commonwealth of Massachusetts HIT Plan and the Commonwealth of Massachusetts 2010 HIE Strategic and Operational Plan, previously approved by ONC. The SMHP Executive Team also determined that stakeholder feedback should be obtained since the SMHP's goals and objectives would be drawn, in large part, out of the existing statewide Planning documents.

As a result, stakeholder outreach activities conducted by MassHealth were expanded to include a ranking exercise with provider associations in order to identify high-priority objectives. With the assistance and input from Providers, four goals were adopted from the previously developed Statewide HIT Strategic Plan. Additionally, ten objectives were adopted, one objective was modified, and three new objectives were documented for use within the SMHP. The following goals and objectives were adopted (modified/new objectives are displayed below in ***bold, underlined italics***):

Goal 1: Improve access to comprehensive, coordinated, person-focused health care through widespread provider adoption and meaningful use of certified EHRs.
Objectives: **1.1** Equitably increase the number of providers who can demonstrate meaningful use of interoperable EHRs across all service areas, including rural, suburban and urban areas where health disparities have been identified.

1.2	Assure private and secure electronic access, use and portability of protected health information by all authorized individuals.
1.3	Increase the number of patients whose care is coordinated across disparate delivery systems within the state and across state boundaries.

Table 1: SMHP Goals and Objectives (Goal 1)

Goal 2: Demonstrably improve the quality and safety of health care across all providers, through Health IT that enables better coordinated care, provides useful evidence-based decision support applications, and can report data elements to support quality measurement.	
Objectives:	
2.1	Equitably increase the number of ambulatory primary care providers that have re-engineered their care processes, to better manage chronic conditions, through adoption of patient centered medical home processes and Health IT that supports evidence-based care.
2.2	Adopt and promulgate a common set of Health IT enabled quality and safety measures across all payers and providers.
2.3	Commit to the principles that hospitals and health care providers would report quality and safety measures one way, one time and to one place, to ensure they are collected consistently and with minimum administrative burden.
2.4	***Behavioral Health, Substance Abuse and Long-Term Care Providers are included in the HIE to improve overall quality of care.***
2.5	***Transitions of care will be improved across the population.***
2.6	Adopt meaningful use measures, as defined by the federal government, for reporting purposes across all agencies.

Table 2: SMHP Goals and Objectives (Goal 2)

Goal 3: Slow the growth of health care spending through efficiencies realized through the use of Health IT.	
Objectives	
3.1	All payers in the Commonwealth will adopt a single set of Federal standards for eligibility and claims payment processes, which will be incorporated into certified EHRs.
3.2	Patients report more timely, effective and appropriate care, both virtual and face to face.
3.3	Engage patients to actively participate in managing their health information, their health and their care, and encourage providers to engage with and respond to their patients.

Table 3: SMHP Goals and Objectives (Goal 3)

Goal 4: Improve the health of the Commonwealth's population through public health programs, research and quality improvement efforts, enabled through efficient, accurate, reliable and secure health information exchange processes.	
Objectives:	
4.1	***Efficiently track and demonstrate improvement in the Commonwealth's key public health measures.***
4.2	***Develop and improve EOHHS and public infrastructure and capabilities to allow for robust participation in the Statewide HIE.***
4.3	Support health reform in the Commonwealth, by providing ready access to data and information that is necessary for identification and implementation of key reform policies and strategies, being meticulous about protecting patient information and carefully following the minimum necessary use of information standards.

Table 4: SMHP Goals and Objectives (Goal 4)

Projects and Initiatives:

The MassHealth Agency's Information Technology Team in collaboration with MeHI identified fourteen EOHHS SMHP HIT Projects for funding and full implementation in support of the "To-Be" Vision. Detailed project descriptions as well as a discussion of the strategies to be utilized to move from the "As-Is" to the "To-Be" environment can be found in Section E (The State's HIT Roadmap) of this report. The projects are listed below:

#	EOHHS SMHP HIT Projects
1	All Payer Claims Database
2	Claims Relay Service Analysis and Design Project
3	Connection to Quality Data Center
4	Direct Project Gateway Interface (formerly NHIN Direct)
5	Enterprise Record Locator Service (ERLS)
6	Formulary/Medication Management
7	MA Virtual Gateway
8	Medicaid EHR Incentive Payment Program
9	Provider Directory Interface
10	Public - Health Information Service Provider (P-HISP)
11	Public Health - Health Level Seven (HL7) Interfaces
12	Public Key Infrastructure (PKI)/Certificate Management
13	Re-architecting and Enabling Payment Methodologies
14	Statewide HIE Solution Integration Services

Table 5: EOHHS SMHP HIT Projects (This List is in Alphabetical Order)

Section E (The State's HIT Roadmap):

The State's HIT Roadmap is the culmination of the work undertaken by the Commonwealth to document the operational activities required to support the Medicaid EHR Incentive Payment Program in year one (2011), and the IT projects required in order to achieve the desired 5-year SMHP vision for MassHealth and EOHHS. The major activities undertaken to complete the Roadmap included internal and external meetings to develop the Roadmap framework, planning sessions to identify SMHP HIT projects, and brainstorming sessions regarding resource requirements and preliminary benchmarks. Meetings within EOHHS and the SMHP Executive Team were held to develop and validate the Roadmap approach, and review draft sections of the Roadmap. These meetings were essential to establishment of the framework for drafting the Roadmap and developing the buy-in of the individuals who will be responsible for implementing and carrying out SMHP activities.

The graphical pathway represents the key milestones for the 14 strategic projects. Together, these project milestones represent the journey from the state's current Medicaid HIT/HIE environment to the state's future environment. As the state recognizes that projects and timelines may change over time, this Graphical Pathway will be revisited and adjusted during annual updates to the SMHP in order to reflect actual project status (as needed).

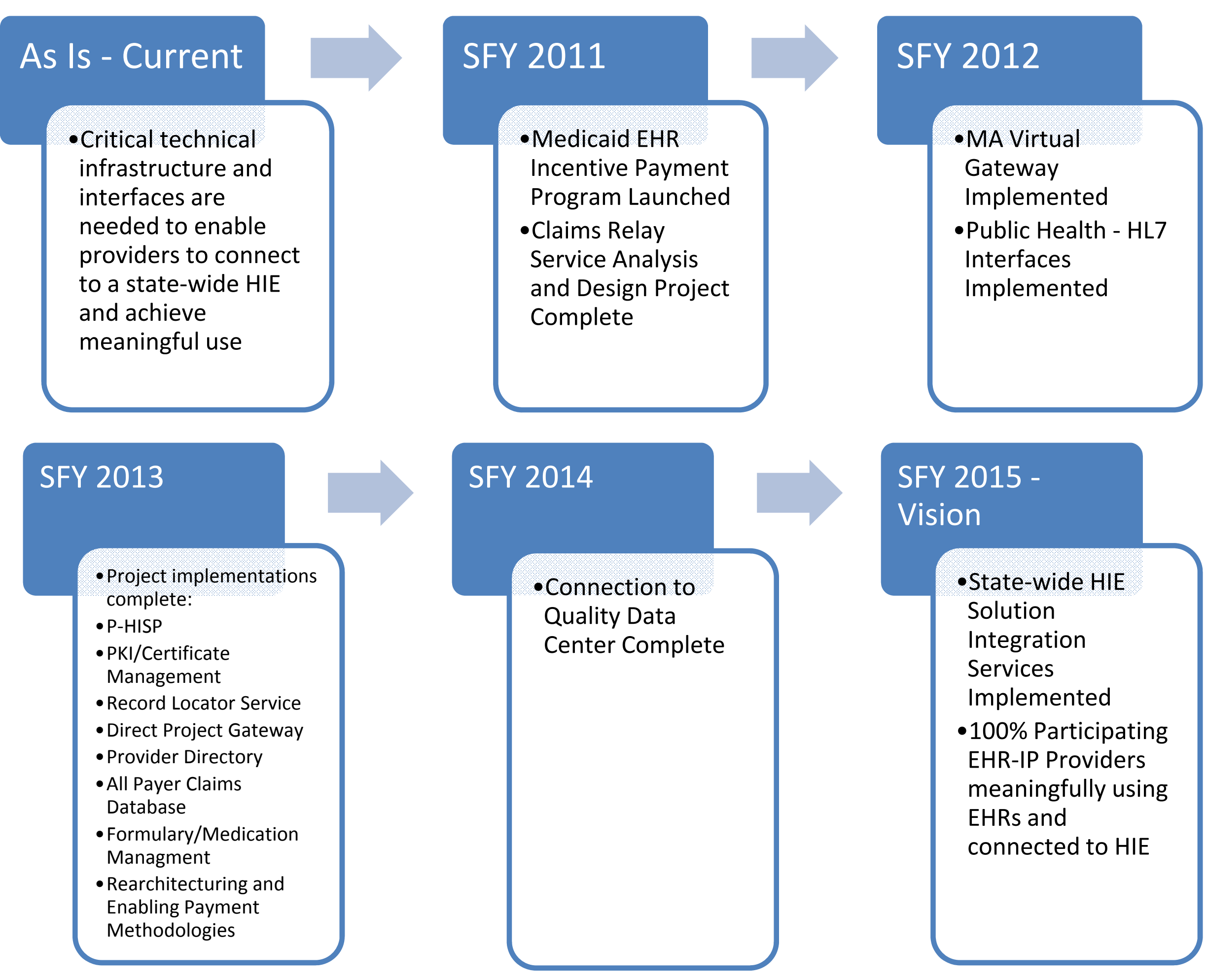


Diagram 3: The Roadmap's Graphical Pathway

Section E (The State's HIT Roadmap) includes additional detail on the timelines (estimated planned start and end dates for each project).

Executive Summary - Conclusion

By 2015, as a result of the activities described throughout the SMHP, EOHHS and MassHealth, their members and providers will be connected to and engaged with health information in ways that are simply not possible today. Members will be assured when they go to their doctor's office that their provider will have access to their medical record at the point-of-care, the information is accurate and secure, and the information is up-to-date. MassHealth will be able to measure health outcomes in ways not possible today due to the proliferation of EHRs and the robust development of the "network of networks" necessary to share clinical information throughout the Commonwealth.

The Commonwealth of Massachusetts 2010 Health Information Exchange Strategic and Operational Plan presented by MeHI, and subsequently accepted by ONC, describes that there are multiple sustainable HIEs already functioning in Massachusetts. The expectation going forward is that enough value will be derived by all HIE stakeholders to ensure an on-going sustainable statewide HIE in the Commonwealth, with an appropriate combination of public and private resources to support it after ONC funds have been expended. A key component of the sustainability model will be the inclusion of MassHealth and the ability to access federal matching funds, when available, to support the technical infrastructure required for the Medicaid EHR Incentive Payment Program, but also continues to support other initiatives that are fundamental for the future success of the statewide HIE.

Through the successful implementation of the HIT projects described in this plan, EOHHS will be enhancing the technical backbone that is required for enabling participation in a robust statewide HIE. The projects identified in the SMHP leverage existing infrastructure and develop new interfaces in an attempt to minimize duplication of efforts and maximize cost effectiveness. In addition, the implementation of the statewide HIE will be one of the pathways to enable the successful implementation of other long-term statewide healthcare initiatives such as the Affordable Care Act.

Successfully completing the projects described in the SMHP will have profound impacts on the Medicaid program and all those who interact with it. However, Massachusetts recognizes the Medicaid EHR Incentive Payment Program is an important component of a much larger vision for Statewide HIE and HIT. The Commonwealth thinks of the SMHP and its activities as an essential building block that will prepare providers throughout the State to become meaningful users of EHR technology, improve service delivery, and enable sharing of healthcare information across the statewide HIE to help inform decision making and improve healthcare outcomes for all of the Commonwealth's Medicaid members.

Alignment with CMS SMHP Requirements

As evidenced by the way the State Medicaid Health Information Technology Plan (SMHP) is structured, the approach used to organize the Plan is in close alignment with the CMS State Medicaid HIT Plan (SMHP) Overview document (OMB Approval Number: 0938-1088). Throughout the Commonwealth's SMHP development work this CMS Template stood as a primary guide. In order to finalize the SMHP, a full assessment of the Proposed Federal Regulation 42 CFR Parts 412, 413, 422, et al. Medicare and Medicaid Programs; Electronic Health Record Incentive Program; Final Rule, the State Medicaid Director Letter SMD#10-016 (Federal Funding for Medicaid HIT Activities), and the CMS State Medicaid HIT Plan (SMHP) Overview document (OMB Approval Number: 0938-1088) was conducted. To assist in the review process that CMS will undertake, the Commonwealth has developed Appendix B (The SMHP Requirements Crosswalk) that extracts the major requirements identified by CMS for the SMHP and creates a crosswalk from the requirement to the specific sub-section in the SMHP where the requirement has been addressed.

Key Terms and Abbreviations

Appendix A (Glossary of Terms and Abbreviations) provides a definition for key terms and abbreviations used throughout the SMHP. This appendix was developed iteratively throughout the SMHP project for a broad audience of stakeholders and project participants. As a result, the appendix includes a wide breadth of items ranging from common Medicaid terminology to terms specific to the MassHealth business and technical environments.

Section A. The State's "As-Is" HIT Landscape

Section A of the SMHP describes the current environment of Health Information Technology (HIT) initiatives in the Commonwealth of Massachusetts from the Medicaid perspective. The assessment of the "As Is" HIT Landscape was conducted in cooperation with EOHHS, MassHealth, the Massachusetts eHealth Institute (MeHI), as well as many key internal and external stakeholders and partners. The section describes the current HIT landscape in terms of the HIT governance structure, key HIT initiatives both within the Commonwealth and across state borders through various multi-state initiatives. In addition, the section provides an assessment of current provider EHR adoption rates estimated from the results of a recently completed EHR provider survey.

Background:

In 2006, Massachusetts pioneered the implementation of health care reform to increase access and coverage to quality, affordable health care to all citizens of the Commonwealth. In recognition of the critical role that Health Information Technology (HIT) could play in supporting health reform initiatives, the Massachusetts legislature enacted Chapter 305 in 2008, an Act to promote cost containment, transparency and efficiency in the delivery of quality health care. Chapter 305 recognized that HIT is a critical component to improve the delivery of health care services to its residents. Chapter 305 is consistent with the health information technology provisions of the American Recovery and Reinvestment Act (ARRA) referred to as the Health Information Technology for Economic and Clinical Health (HITECH) Act despite the fact that Chapter 305 preceded the enactment of HITECH.

Chapter 305 of the Act addresses cost and quality issues, along with the implementation of Massachusetts's healthcare access reform by doing the following:

- Setting the goal of implementing Electronic Health Records (EHR) systems in all provider settings and integrating those systems through a robust Health Information Exchange (HIE) by January 1, 2015;
- Creating the Massachusetts eHealth Institute (MeHI), a division of the Massachusetts Technology Collaborative (MTC) and overseen by the Health Information Technology Council (the "Council"), to coordinate public and private initiatives in support of the statewide deployment of EHR and HIE technologies;
- Using Implementation and Optimization Organizations to support deployment of EHRs and establishment of state-wide HIE;
- Specifying that consent for sharing information through statewide HIE be designed to protect patient privacy and information security, including the patient's choice to participate in sharing their information through HIE at any time; and
- Directing the implementation and dissemination of EHRs to include providers that care for underserved populations, including but not limited to, racial, ethnic and linguistic minorities, uninsured persons and areas with a high proportion of public payer care.

As stated in the Commonwealth of Massachusetts 2010 Health Information Technology Strategic Plan, by 2015, as a result of healthcare reform and statewide deployment and adoption of Health IT, the Commonwealth of Massachusetts believes it will be benefiting from and will be recognized for, a significantly healthier population. It will be experiencing demonstrated measurable improvements in healthcare costs, quality, safety and efficiency and widespread implementation and adoption of EHRs will be providing added access to clinical information to providers at the point of care and to patients and consumers.

Work Performed:

The State's "As-Is" HIT Landscape has been developed in accordance with the Centers for Medicare and Medicaid State Medicaid HIT Plan (SMHP) Overview document (OMB Approval Number 0938-1088). Additional requirements outlining necessary plan content for this Section were identified in the Final Rule[2]. Key areas of focus include understanding what MassHealth is doing today to assist providers and outreach to key stakeholder groups, understanding EHR adoption rates and proactively raising awareness of potential barriers to adoption and participation in the incentive payment program.

Massachusetts developed a statewide Health Information Technology (HIT) Strategic Plan, issued in February 2010. MeHI took a primary role in developing that plan, as well as the Health Information Exchange Strategic and Operational Plan that was submitted in August 2010 and approved in November 2010. In developing this section of the SMHP, MassHealth leveraged the existing research and documentation to complete the requirements of the CMS checklist. In addition, Environmental Scan activities included outreach to over 60 internal and external stakeholders representing numerous provider associations, including, but not limited to:

Provider Associations met with during the SMHP Development
Indian Health Services (IHS)
The Veterans Health Administration (VHA)
Massachusetts Dental Society (MDS)
Massachusetts League of Community Health Centers (MLCHC)
Massachusetts Hospital Association (MHA)
Massachusetts Association of Behavioral Health Systems (ABS)
Massachusetts Medical Society (Pediatricians and Non-Pediatricians)
Massachusetts Coalition of Nurse Practitioners (MCNP)

Table A.0.1: Provider Associations Interviewed

Organization of this Section:

The State's "As-Is" Landscape of the SMHP contains six major sections:

Sub-Sections of Section A (The State's As-Is Landscape)	
Sub-Section	**Contents**
A.1 The Executive Office of Health and Human Services; MassHealth	This sub-section of the report describes the role of MassHealth in serving the Medicaid population of the Commonwealth.
A.2 Statewide HIT Governance	This sub-section of the report describes the Commonwealth's HIT organizational structure, governance, workgroups and HIE model based upon the final version of the Commonwealth of Massachusetts HIT Strategic Plan.[3]
A.3 The HIT Landscape	This sub-section describes the HIT landscape and its many components. This includes the organizations, related initiatives and grants, systems and standards.

[2] Department of Health and Human Services, Centers for Medicare & Medicaid Services, 42 CFR Parts 412, 413, 422 et al. Medicare and Medicaid Programs; Electronic Health Record Incentive Program; Final Rule.
[3] The Commonwealth of Massachusetts 2010 Health Information Technology Strategic Plan v3.0

Sub-Sections of Section A (The State's As-Is Landscape)	
Sub-Section	**Contents**
A.4 Factors Related to EHR Adoption	This sub-section describes the current status of EHR adoption in the Commonwealth and the various components that contribute to this level of adoption. Among these include facilitation efforts, access to broadband in the state, state law or regulations that impact EHR Incentives and other activities.
A.5 HIT/HIE Engaged Stakeholders	This sub-section describes the stakeholders of HIT activities and discusses relationships with HIT coordinator and relationships with outside entities.
A.6 Environmental Scan	This sub-section describes the current provider environment of EHR adoption. Interviews were conducted with stakeholders (Providers and Provider Associations) and a provider survey was issued and analyzed by MeHI in September 2010.

Table A.0.2: Sub-Sections of Section A (The State's "As-Is" HIT Landscape)

A.1 The Executive Office of Health and Human Services; MassHealth

This sub-section of the report describes the role of MassHealth in serving the Medicaid population of the Commonwealth.

MassHealth, part of the Executive Office of Health and Human Services, is the single state agency that administers the Massachusetts' Medicaid program. MassHealth provides healthcare benefits and premium assistance for low and medium income families, uninsured families, disabled individuals, children and individuals living in Massachusetts, including multiple waiver programs such as the Community Based waiver programs and the autism waiver program. In Massachusetts, Medicaid (Title XIX of the Social Security Act), the Children's Health Insurance Program (CHIP: Title XXI of the Social Security Act), CommonHealth (medical support for the disabled), Children's Medical Security Plan (CMSP) and other health benefit programs for specific populations are administered as one program: MassHealth.

MassHealth received approval of its HIT-PAPD in May 2010. The approval of the HIT-PAPD enabled the development of the SMHP. The SMHP includes the plan on how MassHealth will implement, operate, administer and oversee the Medicaid EHR Incentive Payment Program. MassHealth's goal is to launch its incentive program in the late summer of 2011.

In addition to overseeing the Office of Medicaid, the Executive Office of Health and Human Services also oversees fifteen health and human services agencies as depicted in the organizational diagram below. EOHHS works to ensure collaboration across each of these agencies to provide for coordinated care and benefits for each person, regardless of which agency is providing the services.

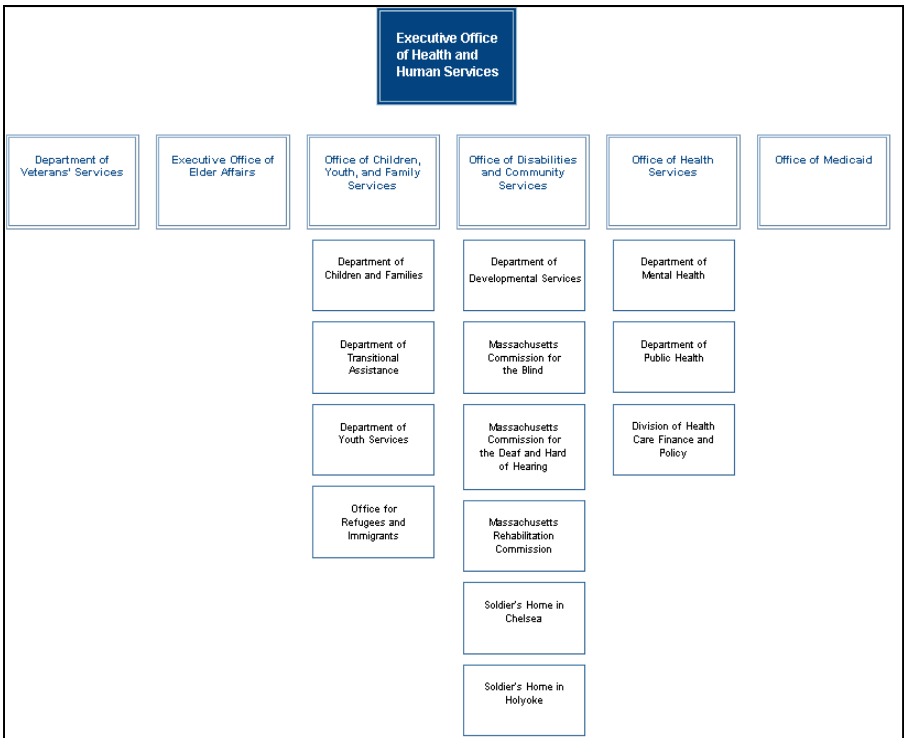


Diagram A.1: High-Level Organizational Structure of EOHHS[4]

[4] http://www.mass.gov/bb/h1/fy10h1/brec10/dpt/hcehs.htm

As of September 2010, MassHealth provided comprehensive health coverage to nearly 1.4 million eligible low income children, families, people with disabilities and seniors throughout the Commonwealth. Nearly 800,000 of the 1.4 million members are provided services through the State's managed care programs. These programs consist of five Managed Care Organizations (MCOs), with a total enrollment of 481,000 members and the Primary Care Clinician Plan (PCC Plan), with a total enrollment of 319,000 members. PCC Plan members receive their behavioral health services through a managed behavioral health vendor.

In addition, MassHealth administers Senior Care Options (SCO), a fully capitated Medicare and MassHealth managed care program. This program is available to both dually-eligible and MassHealth-only seniors (age 65 and over) and serves as a voluntary comprehensive health plan that covers all the services that are reimbursable under Medicare and MassHealth. MassHealth also administers the fully capitated Medicare and MassHealth managed program called the Program of All Inclusive Care for the Elderly (PACE) program available to frail individuals age 55 and over who meet nursing facility clinical criteria and who, at the time of admission, are able to remain in the community with support. MassHealth administers its program for those under age 65 through a statewide demonstration project that makes health insurance available to a number of previously uninsured individuals. Massachusetts has amended its 1115 Demonstration Waiver to reflect the legislation signed into law in April 2006 that provides access to affordable health insurance to nearly all Massachusetts residents. This landmark health reform legislation is known as Chapter 58 of the Acts and Resolves.

A key component of Chapter 58 was the creation of the Commonwealth Health Insurance Connector Authority. The Connector provides subsidized coverage, known as Commonwealth Care, to individuals in Massachusetts with incomes at or below 300% of the FPL that are not eligible for MassHealth and who do not have access to coverage through employment. In addition, Chapter 58 provides coverage for individuals and small businesses through the Commonwealth Choice program. The Connector requests that health insurers create plans for all kinds of consumers and puts its Seal of Approval on the plans that meet the Connector's standards for quality and value. To assist individuals in selecting coverage through Commonwealth Choice the Connector developed a comprehensive, accessible, website that allows individuals to compare health plans on a number of metrics.

The table on the following pages shows both the MassHealth and 1115 Waiver Populations:

Massachusetts-MassHealth and 1115 Waiver Populations
MassHealth Standard - Premium assistance and direct medical benefits for low income families.
MassHealth Breast and Cervical Cancer Treatment Program - Direct medical benefits for uninsured women under the age of 65 with breast and cervical cancer.
MassHealth CommonHealth - Premium assistance and direct medical benefits for disabled individuals who are not eligible for MassHealth Standard.
MassHealth Family Assistance - Premium assistance and direct medical benefits for individuals with HIV; Premium assistance and direct medical benefits for low income children who are not eligible for MassHealth Standard. Parents may be covered by private insurance incidental to premium assistance payments made on behalf of the child. Children may be covered through the CHIP program.
MassHealth Basic - Premium assistance or direct medical benefits for individuals receiving state funded Emergency Assistance to Elderly, Disabled and Children (EAEDC) or are Department of Mental Health clients who are long-term or chronically unemployed.
MassHealth Essential - Premium assistance or direct medical benefits for individuals who are long-term or chronically unemployed and who are not eligible for MassHealth Basic.
MassHealth Limited - Emergency services for individuals whose immigration status makes them ineligible for other MassHealth programs; same as MassHealth Standard.

Massachusetts-MassHealth and 1115 Waiver Populations
MassHealth Prenatal - Short-term outpatient prenatal care for pregnant women who have applied for standard and are awaiting eligibility approval.
MassHealth Insurance Partnership - Premium assistance payments for MassHealth members and qualified employers.
Commonwealth Care - The hallmark of Chapter 58 is the Commonwealth Care Premium Assistance Program, which is administered by the Massachusetts' Commonwealth Connector Authority (the Connector).
Medical Security Plan The Medical Security Plan (MSP) - Provides premium assistance or direct medical benefits to individuals who are receiving non-employment compensation benefits under Massachusetts General Law Chapter 151A.
Health Safety Net - Massachusetts introduced the Health Safety Net (HSN) under Chapter 58 as a successor to the Uncompensated Care Pool.
Healthy Start-The Healthy Start Program provides health insurance to low income, uninsured pregnant women in order to improve access to: early, comprehensive and continuous prenatal care to improve the health of newborns and their mothers.

Table A.1: MassHealth/1115 Waiver Populations for inclusion in Eligibility Thresholds[5]

Patient Centered Medical Home Initiative

EOHHS is working with a broad group of stakeholders to implement a multi-payer Patient-Centered Medical Home Initiative (PCMHI), through which primary care practices across the Commonwealth will be supported in implementing the patient centered medical home model of care delivery over a three-year period. Through a competitive Request for Responses (RFR) process, 46 primary care practice sites were selected to participate in the PCMHI beginning in November 2010. These selected sites include a group of 14 community health center sites who are also participating in the Commonwealth Fund/Qualis Health Safety Net Medical Home Initiative (SNMHI).

EOHHS is also implementing a pediatric PCMH project as part of a Children's Health Insurance Program Reauthorization Act (CHIPRA) Quality Demonstration Grant. This grant comes in partnership with four other grant partners: Children's Hospital Boston, the Massachusetts Health Quality Partners and the National Initiative for Children's Healthcare Quality and the University of Massachusetts Medical School. The ultimate goal of EOHHS is to expand the PCMH delivery model to all providers statewide over the next few years.

A key goal of MassHealth leadership is to utilize statewide HIE technology and infrastructure to support the implementation of the Patient Centered Medical Home Initiative. The statewide HIE will enable the secure exchange of health related information of MassHealth members across all providers, payers and state agencies. EOHHS leadership envisions that the ubiquitous exchange of health information will ultimately lead to significant improvements in the efficiency, quality and cost effectiveness of heath care services delivered to MassHealth members through improved care coordination, administrative simplification and quality reporting.

[5] Information provided by the MassHealth EOHHS Project Manager

A.2 Statewide HIT Governance

This sub-section of the report describes the Commonwealth's HIT organizational structure, governance, workgroups and HIE model based upon the final version of the Commonwealth of Massachusetts HIT Strategic Plan.[6]

A.2.1 Governance Structure

The HIT Council

The HIT Council, as described in Chapter 305, consists of nine members, including four representatives of governmental agencies and five representatives from the private sector. The four agencies are the Executive Office of Health and Human Services, the Executive Office for Administration and Finance, the Health Care Quality and Cost Council and the Medicaid Office. The five private sector members are appointed by the Governor. Of the five, one is to be an expert in health information technology, one an expert in law and health policy and one an expert in health information privacy and security. The HIT Council is chaired by the Secretary of the EOHHS, who also chairs the Health Care Quality and Cost Council and oversees the Medicaid Office. Because of these various roles, the Secretary, in partnership with the private sector, will define the governance structure, which will be established to implement a statewide HIE in the Commonwealth. The enhanced governance structure will ensure that various agencies of the Commonwealth and private sector organizations are coordinated.

Massachusetts Technology Collaborative (MTC)

MTC is an independent development agency chartered by the Commonwealth to promote new economic opportunity and foster a more favorable environment for the formation, retention and expansion of technology-related enterprise in Massachusetts. MTC serves as a catalyst for growing the knowledge and technology-based industries that comprise the Commonwealth's Innovation Economy. As one of its activities, MTC works with major healthcare organizations to implement e-health solutions that are intended to improve the quality and continuity of patient care and reduce costs. MTC operates at the intersection of government, industry and academia. It brings together leaders and stakeholders to advance technology-based solutions that lead to economic growth and improved healthcare. MTC energizes emerging markets by filling gaps in the marketplace, connecting key stakeholders, conducting critical economic analyses and providing access to intellectual and financial capital. MTC operates four programmatic divisions that support economic growth and innovation and attempt to generate public benefits for Massachusetts citizens. MTC functions as the legal contracting entity for all of its divisions:

1. **The Massachusetts Broadband Institute:** Exists to extend affordable high-speed Internet access to all homes, businesses, schools, libraries, medical facilities, government offices and other public places across Massachusetts.
2. **Healthcare and Life Sciences Unit:** Assists the activities of Massachusetts's world-class universities, teaching hospitals and research institutions as well as our biotechnology, medical device and pharmaceutical companies.
3. **John Adams Innovation Institute:** A public economic development agency that fosters a more favorable environment for the formation, retention, and expansion of technology-related enterprises in Massachusetts.

[6] *The Commonwealth of Massachusetts 2010 Health Information Technology Strategic Plan v3.0*

4. **Massachusetts e-Health Institute:** Responsible for advancing the dissemination of health information technology across the Commonwealth, including the deployment of electronic health records systems in all healthcare provider settings that are networked through a statewide health information exchange.

Massachusetts eHealth Institute (MeHI)

Chapter 305 created MeHI as a non-divisible component of the MTC. It also created the Health Information Technology Council (HIT Council), chaired by the Secretary of Health and Human Services, to oversee MeHI's activities. MTC, acting through MeHI and the Council collectively, constitutes the single State entity responsible for coordinating and facilitating the dissemination of EHR systems throughout the Commonwealth. MeHI, working with the Council, was tasked with developing and implementing a statewide plan to carry out this objective. Chapter 305 also contains a mandate that the Massachusetts Department of Public Health (MDPH) and the Board of Registration in Medicine (BORIM) adopt regulations requiring the demonstration of competent use of EHR systems, as a condition of licensure for hospitals, community health centers and physicians.

MeHI is collaborating with the BORIM, MassHealth (Medicaid) and MDPH to ensure a consistent approach for meeting the needs of both Chapter 305 and the Meaningful Use requirements of the HITECH Act. MeHI's Director is appointed by MTC's Executive Director and is charged, under the Act, with preparing the Commonwealth's Health Information Technology Plan and Health Information Exchange Strategic and Operational Plan and their corresponding budgets for implementation. In addition, the MeHI director is the state's Health IT coordinator and is responsible for aligning the state's Health IT activities. MeHI operates under the guidance of both the MTC and the HIT Council and its chair, the Secretary of EOHHS. Additionally, the HIT Council approves the HIT Strategic Plan and the HIE Strategic and Operational Plan that are prepared by MeHI.

With approval from the HIT Council, MeHI also develops the various mechanisms for funding HIT through use of the state eHealth Fund. Grants awarded from the eHealth Fund are based on recommendations of the MeHI Director and are subject to the approval of MTC's Board and the HIT Council. In close consultation and collaboration with the Medicaid Office (MassHealth) and Executive Office of Health and Human Services Information Technology Office, the Act also charges MeHI to maximize federal Medicaid matching funds that may be available.

MeHI currently supports two separate and distinct programs and is proposing to support a third, the Enrollment, Validation and Outreach Team (MeHI/EVOT), that will carry-out incentive payment activities as described in Sections C and D of the SMHP. MeHI's programs are described in more detail below:

1. **Regional Extension Center Program (MeHI/REC):** The structure of this program is based on the use of Implementation and Optimization Organizations (IOOs) to provide implementation services to physicians. The IOOs are contractually obligated to provide the services to guarantee that providers achieve meaningful use. The MeHI/REC program provides oversight of the IOOs and EHR vendors to ensure conformance with state (including Chapter 305) and federal law in the statewide implementation of EHR. MeHI/REC administers ONC "direct assistance" to priority primary care providers who meet federal grant guidelines;
2. **Health Information Exchange Program (MeHI/HIE):** The structure of this program is based on the use of a diverse group of public and private stakeholders to support a

"network of network" approach to a Statewide HIE. The MeHI/HIE role is to provide administration of the ONC Cooperative Agreement funds and to ensure the effective implementation of the Statewide HIE. MeHI/HIE will procure and contract with vendors to deploy and operate the Statewide HIE services; and

3. **The Medicaid EHR Incentive Payment Program Enrollment, Validation, and Outreach Team Program (MeHI/EVOT):** The structure of this program is based on a separate and distinct operational team that will support the Medicaid Incentive Payment Program through an agreement with EOHHS. The MeHI/EVOT role will be to provide incentive program enrollment, validation, and outreach support services to providers. MTC shall track and report on the MeHI/EVOT activities separately from the other MeHI activities. MTC shall use its accounting and financial systems for the MeHI/EVOT in a similar manner to its tracking for other programs, including federal grants. The financial systems shall segregate all revenues and expenditures associated with MassHealth and Incentive Program activities.

Regional Extension Center

As the State's designated agency to receive HITECH funding under the State Health Information Exchange Cooperative Agreement Program, MeHI/REC will serve as the single Regional Extension Center (REC) for the entire Commonwealth. Through the REC, the Commonwealth will provide assistance to priority primary care providers to promote implementation of EHRs. Priority primary providers include primary care providers in individual and small practices (ten or fewer professionals with prescriptive privileges) principally focused on primary care; public and critical access hospitals; community health centers and rural health clinics; and other settings that predominantly serve uninsured, underinsured and medically underserved populations.

The MeHI/REC business model involves establishing agreements with approved Implementation and Optimization Organizations (IOOs) to deliver Health IT services that will support adoption and meaningful use of certified EHRs within the physician offices. The IOOs will in turn contract with providers to offer a full range of adoption and meaningful use support services, including clinical and technical implementation. Once providers are operational, the IOOs will assist providers with Chapter 305 compliance and eligibility for participation in the Statewide HIE. This model provides unique benefits and efficiencies, as it will permit the Commonwealth to harness the services of all of the highly experienced MeHI/REC approved IOOs in the state simultaneously, thus accelerating the goal of statewide EHR adoption. MeHI/REC will provide value-added services for all participating providers.

MeHI will provide value-added services for all participating REC providers. Through the use of clinical relationship managers, the REC will provide education on meaningful use, HIEs and advanced compliance. In addition, the REC will provide the following initial and ongoing services:

Initial REC Services Provided:

- Provide education, including REC program overview and State and Federal Health IT Programs;
- Promote financing alternatives, such as Loan Programs;
- Certify IOOs and establish required contract provisions between providers and IOOs;
- Evaluate and structure arrangements with EHR and other vendors;
- Consolidate and aggregate practices by geography and timeframe for more efficient implementations;
- Supply readiness assessment tool for provider pre-qualification; and

- Establish standardized contract provisions.

Ongoing REC Services Provided:

- Communicate to providers and consumers for targeting, education and outreach;
- Coordinate Community of Practice (CoP);
- Provide Medicaid Provider Incentive Payment Program operational services pending CMS approval; and
- Provide ongoing education and support for Federal and State Health IT compliance including Meaningful Use, HIPAA, HIE, Chapter 305, Quality Improvement Coaching and Privacy and Security.

Health Information Exchange

In 2009, MeHI received initial funding of $15 million in state funds through Chapter 305. The public sector funding is intended, among other goals, to seed the initial development of a statewide HIE, so neither state nor federal funding is viewed as a primary or ongoing source of funding. In February 2010, MTC/MeHI received a four-year grant award from the Office of the National Coordinator to complete the development of the HIE planning process and to begin the deployment of the statewide HIE.

Ad-Hoc Workgroups

Given the breadth of expertise in the Health IT area possessed by HIT professionals of the Commonwealth and the importance of including substantial private sector input into the planning process for HIE development and maintenance, the Secretary of the Executive Office of Health and Human Services, as chair of the HIT Council and using MeHI to coordinate, has established six Ad-Hoc Workgroups. The Workgroups will serve as the primary source for obtaining advice and recommendations, when needed, from private sector participants in addition to those who formally serve on the HIT Council. The Workgroups are expected to be instrumental in maximizing public/private collaboration, facilitating communication and helping to assure that strategic alignment exists between the work of the HIT Council and national HIT activities.

The Workgroups, through their role in providing advice and guidance to the HIT Council, are expected to make invaluable contributions to the shape and successful implementation of the state Health IT Strategic Plan. However, because of the application of certain provisions of Massachusetts law, the Workgroups will not have direct executive or oversight functions and will be convened only when the HIT Council has a particular issue to address that can benefit from private sector comment or discussion. Where possible, the Ad-Hoc Workgroup will also be leveraged to support multiple Health IT initiatives in the Commonwealth.

The six Ad-Hoc Workgroups are:

1. Clinical Quality and Public Health Workgroup;
2. Consumer Engagement Workgroup;
3. Privacy and Security Workgroup;
4. Regional Extension Center/Electronic Health Records Workgroup;
5. HIE Workgroup; and
6. Workforce Development Workgroup.

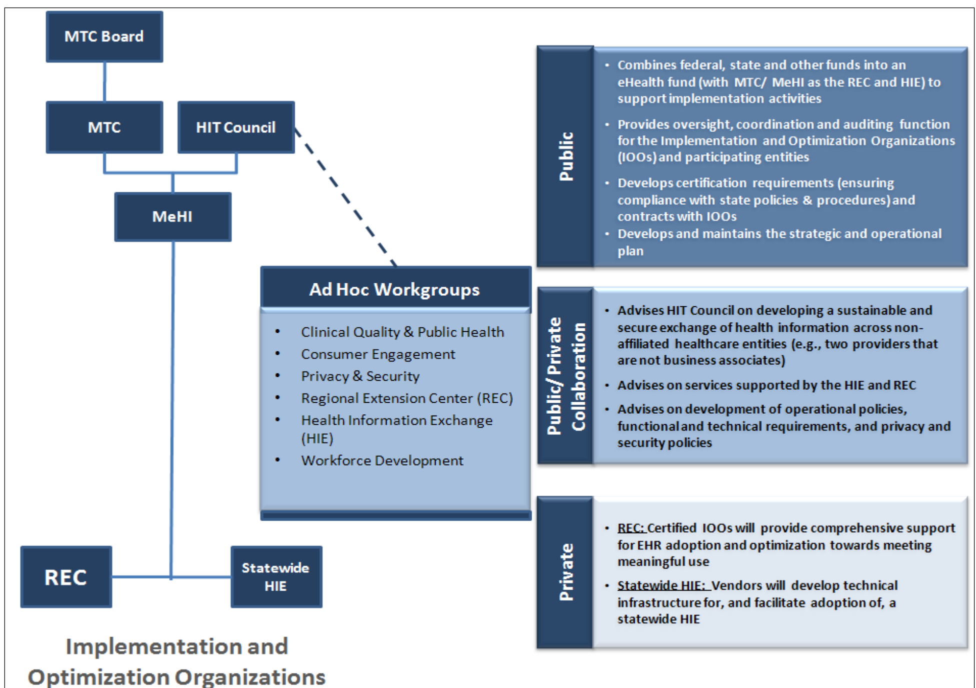


Diagram A.2.1.1: Schematic of Governance Structure[7]

MassHealth HIT Steering Committee

The Commonwealth has established an organizational structure for statewide HIT planning that enables MeHI, EOHHS and MassHealth leadership and staff to fully participate in all aspects of statewide HIT planning and development. In addition to the HIT Council and Adhoc Workgroups, EOHHS established the MassHealth HIT Steering Committee in 2009. It meets on a bi-weekly basis and the charter for the Steering Committee was approved by the Committee in December 2009. The Steering Committee is responsible for planning, coordinating and prioritizing HIT projects and initiatives within EOHHS and across the state while reducing duplication of effort and maximizing federal funding. Key activities that the EOHHS HIT Steering Committee has focused upon include:

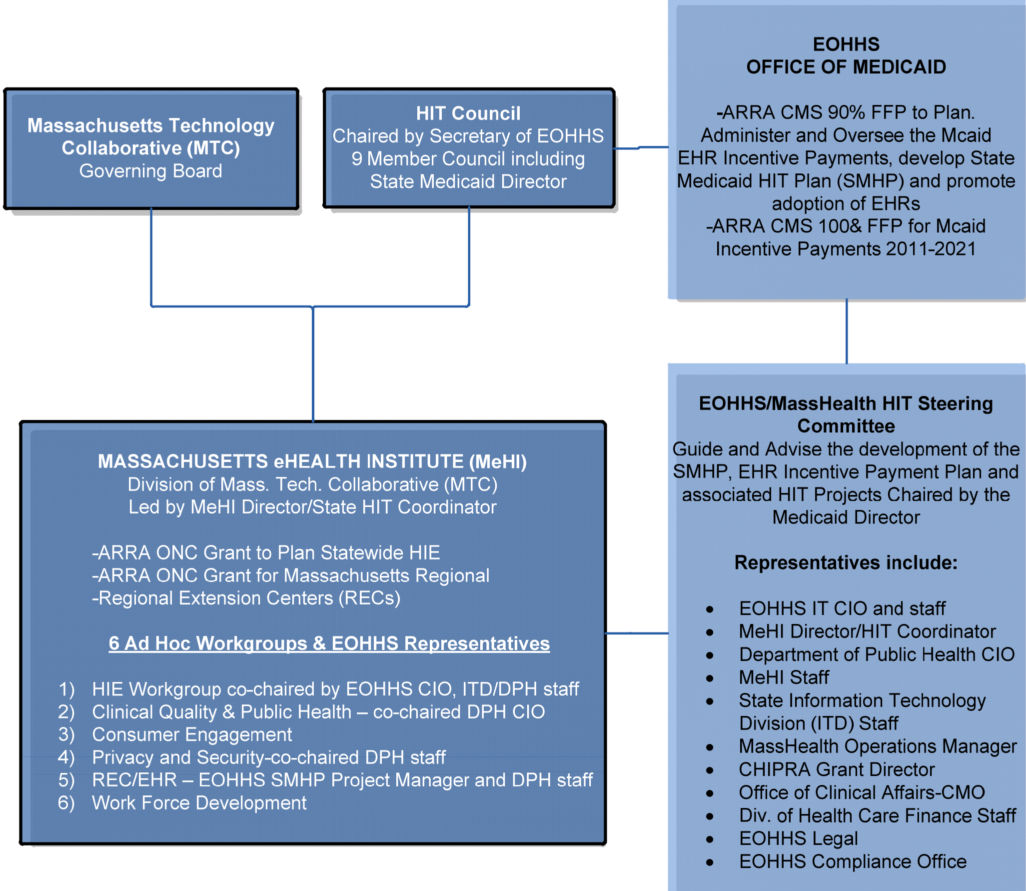
- Planning and development of the SMHP; including implementing and administering the Medicaid Provider EHR Incentive Payment Program;
- Identifying other EOHHS specific projects related to the overall Commonwealth HIT plan and successfully planning, implementing and administering these both in support of specific EOHHS agendas and the overall HIT goal; and
- Supporting the HIT Council and MeHI in planning, implementing and administering the statewide HIE and Regional Extension Centers (REC) through active participation in workgroups, training sessions and attendance at regular meetings; sharing of information such as project plans, analyses, evaluations, education and outreach materials; planning and evaluating how current EOHHS HIT projects may be expanded to support statewide HIT efforts (e.g., HL7 Gateway and Network Rationalization Project).

[7] Massachusetts 2010 Health Information Exchange Strategic and Operational Plan v2.7.9.

- Develop a work group that will identify opportunities and sources of funding to support providers that are not currently eligible for HITECH incentive payment programs in their adoption of certified EHR technology (i.e., behavioral health providers, long-term care providers, public health hospitals, etc). The services provided by these incentive program "gap" providers' represent a large portion of MassHealth's budget and finding resources to promote the adoption of certified EHR technology and meaningful use of that technology for these providers is a key goal of the HIT Steering Committee.

The chart below details the coordination of communications between the State HIT coordinator, State designated Entity (MeHI) and EOHHS/MassHealth.

Diagram A.2.1.2: Massachusetts HITECH Communication Flow[8]



A.2.2 Massachusetts Health Information Exchange (HIE)

The Commonwealth will employ a HIE governance model based on a public-private collaboration that will assure substantial input from the private sector, including consumers and consumer advocates, into the formulation of HIE policy, while retaining accountability, oversight and decision-making authority in governmental agencies, specifically the HIT Council and the Massachusetts Technology Collaborative.

[8] Information provided by the MassHealth EOHHS Project Manager.

EOHHS and MassHealth are working closely with MeHI to support planning efforts for the state-wide HIE. The EOHHS Secretariat CIO co-chairs the HIE workgroup. MeHI/HIE stakeholders represent many state interests: Indian tribes, providers, insurance companies, patients/consumers, healthcare associations, HIT vendors, healthcare purchasers and employers, public health and other state agencies, professional health institutions and clinical researchers. The planning effort is conducted through an open and transparent process of communication with the larger healthcare community. MeHI is collaborating with the Board of Registration in Medicine, the Board of Registration in Dentistry, EOHHS, MassHealth and the Massachusetts Department of Public Health to ensure a consistent approach for meeting the needs of both Chapter 305 and the Meaningful Use requirements of the HITECH Act.

Massachusetts' concentration of leading universities, research organizations and public and private enterprises already engaged in healthcare innovation and information technology make it a national leader on these issues. Massachusetts has historically been at the cutting edge of thought leadership in healthcare and health information technology. A significant amount of time, effort and capital has already been invested in building several community and provider-based HIEs in Massachusetts. The existing high-level of collaboration and coordination among entities in Massachusetts will allow MeHI to build on the depth and breadth of HIE expertise in the Commonwealth.

On February 12, 2010, MTC/MeHI received notification of a grant award in the amount of $10.6 million for both the development of an HIE Operational Plan and the implementation of a statewide HIE. Subsequently, in November of 2010, the HIE Strategic and Operational plan was approved by the Office of the National Coordinator (ONC). There are already multiple, sustainable HIEs currently in use in Massachusetts. The expectation is that going forward, if enough value is derived by the HIE stakeholders; the Statewide HIE will remain sustainable even after ONC funds have been expended. Massachusetts has planned it's HIE model using a long-term strategy.

In developing its HIE, Massachusetts plans on leveraging the strong existing HIE capabilities by utilizing a hybrid model that allows for both a centralized model, which collects, maintains and perhaps extracts/combines individually identifiable health information for quality reporting and a federated model which utilizes a Master Patient Index that would allow for the complete patient record to remain with providers, but for demographic information to be maintained within the HIE, for clinical data transactions. MeHI will build a statewide system, based on a federated model and will only store data in centralized repositories, when absolutely necessary, to support specific uses, such as public health, quality reporting and overall population management. Leveraging and building upon the existing HIEs currently operating in Massachusetts will allow MeHI to structure the system as a network of networks. A core element of the HIE is to protect the privacy and security of the information with which it is entrusted and to operate in a manner that is fully transparent and accountable to the public.

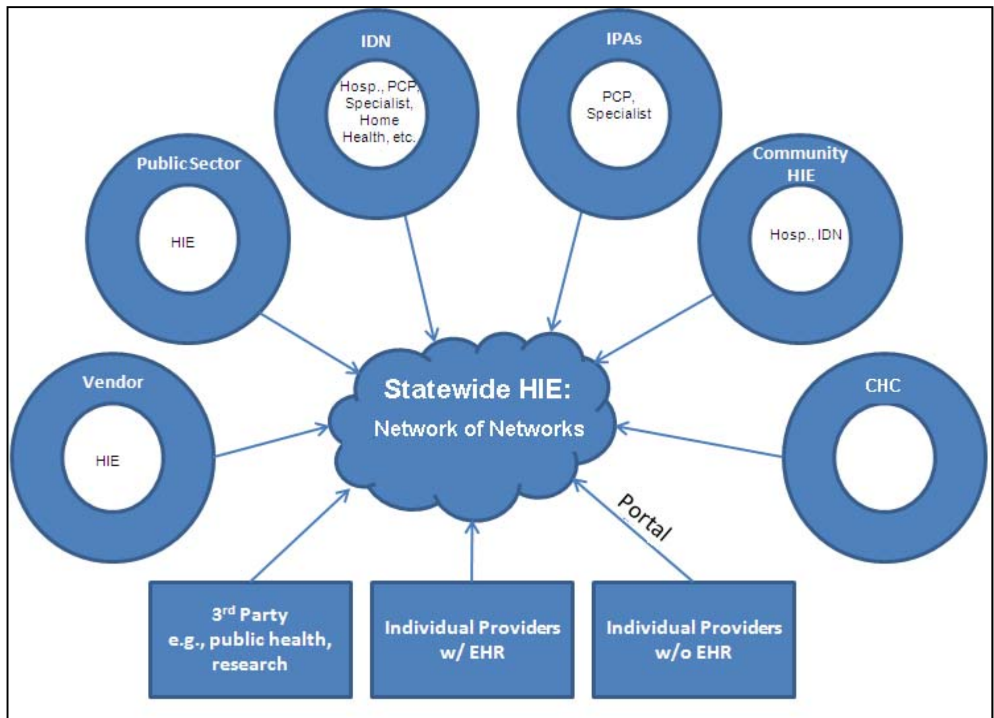


Diagram A.2.2.1: Hybrid HIE; a "Network of Networks[9]"

A key component of the sustainability model will be the close partnership with MassHealth and the ability to access federal matching funds, where available and appropriate, to support the technical infrastructure. Building a Statewide HIE, which will link the information that is currently captured in paper charts and unconnected EHRs, will help put the patient at the center of the healthcare delivery system. As the Commonwealth's healthcare reform initiatives move forward, a flexible HIE architecture will support models that require sharing of data across multiple sites. Examples of existing HIEs at MassHealth providers and managed care organizations include the following:

Existing HIEs at MassHealth Providers and Managed Care Organizations		
HIE Entity	**Data Sharing Capabilities**	**Standards Used**
Atrius Health	Clinical summaries data sharing view into other systems e.g. BID "Magic Button" CHAPS with SSH (See below), Claims submission, registration eligibility checks, electronic remits, referral auth and claims status	TLS for encryption of document sharing. CHAPS standards are listed below.
Baystate Health System	Lab, micro, path, bbk Results, Rad results, cardiology result, documents/notes, clinical summaries, H&P, allergies	HL7/CCD, X12, XML, web services, J2EE

[9] August 2010. The Commonwealth of Massachusetts 2010 Health Information Exchange Strategic and Operational Plan v2.7.9

Existing HIEs at MassHealth Providers and Managed Care Organizations		
HIE Entity	**Data Sharing Capabilities**	**Standards Used**
Boston Medical Center / Boston HealthNet	Share Meds, Probs, Allergies, Labs, Vaccines, Referral Notes, Consult Notes (soon to exchange D/S, ED Notes) using Community Information Exchange (CIE)	CIE utilizes the following protocol and terminology standards: HITSP (TP22, TP23, TP30, C78, C32, CT17,T15,T16, C48) IHE PROFILES (PIX, PDQ, XDS, BPPC, PCC, ATNA, CT, DDR) Terminologies (RxNorm, ICD, LOINC)
Cambridge Health Alliance/Mount Auburn Cambridge Independent Practice Association, Inc. (MACIPA)	Lab, Rad (Text only), Departmental Reports, Discharge Summary, ADT for external PM systems	HL7
Cape Cod Healthcare System	N/A	N/A
CareGroup	All HIPAA/administrative simplification transactions and code sets, clinical summaries, eRx, public health reporting, quality measurement and reporting	ANSI X12, HL7/CCD, NCPDP SCRIPT
Caritas Christi Healthcare System	N/A	N/A
Central Mass IPA	Data warehouse	CDA/CCD, .net, HL-7, SQL server
Community Hospitals and Physician Practice Systems (CHAPS)	Regional Patient registration matching, external medical summaries, discharge summaries, notes and dictated reports, Lab, Micro, Pathology results, Image orders and scheduling	HL7, XML, CDA/CCD, PDQ/PIX for patient query, XDS Registry query, Repository Document Retrieval
Hallmark Health System	Unidirectional outbound HL7 for Laboratory, Imaging, Departmental ADT and Scheduled Appointments. Unidirectional inbound HL7 to file charges bi-directional ADT/Order Entry in development HIPAA Transactions for 837/835 Eligibility transactions via Passport	HL7 Scripting ANSI X12 Engine (Microsoft/Sql)
Lahey Clinic	HIPAA transactions, CCD records	HL7 ANSIX12 e-Gate Engine
MA EOHHS Enterprise Service Bus	Synchronous and asynchronous messaging bus with data transformation, data integration, routing, XML Editing, FTS, validation and publishing capabilities using a Web Services and Q based architecture	Web Services standards, J2EE
Massachusetts League of Community Health Centers (MLCHC)	Visit and patient contact documentation including details from EHR products (Dx, medications, vitals, lab results); patient demographics and CPT10 coding from EPM products including insurance	SQL Server/XML
New England Healthcare Exchange Network (NEHEN)	All HIPAA/administrative simplification transactions and code sets, clinical summaries, eRx, public health reporting, quality measurement and reporting	ANSI X12, HL7/CCD, NCPDP SCRIPT

Existing HIEs at MassHealth Providers and Managed Care Organizations		
HIE Entity	**Data Sharing Capabilities**	**Standards Used**
Northeast Health System	All HIPAA/administrative simplification transactions and code sets. Hospital outbound results including discharge summaries, lab, micro, pathology reports, history & physical, public health reporting, quality measurement and reporting	ANSI X12, HL7 , ICD-9-CM, CPT, LOINC, XML,NPI#
Northern Berkshire eHealth Collaborative	Shared (merged) CCD among 14 practices, Lab Results, Radiology Results, soon to be hospital encounters, Hospital data such as discharge summaries, EKG's, PACS Image access, etc. sent to practices also but passes through the HIE, not resident in the HIE for access there	ASTM E2369 -05e1 XML CCD, ICD-9-CM, CPT, Multum
Partners Healthcare System	ED visit notifications, IP Daily census and daily discharges, discharge orders, discharge summaries, patient appointment information, insurance, information, patient clinical information, lab results, images and imaging reports	Site to site TLS encrypted email, fax. HL7, CCD, XMS
SAFE Health	Textual Notes, including: Medication List Allergies Problem List Immunization History Code Status Advance Directive Status PCP and phone number Vital Signs Recent Lab/Rad Results	LOINC SNOMED-CT NPI# HL7 2.x
Signature Healthcare	Laboratory and Pathology results; Radiology Reports; Departmental Reports; Patient Demographics	HL7
Sisters of Providence Health System	N/A	N/A
SouthCoast Health System	Live: patient registry data, laboratory data, ePrescribing, voice recognized/transcribed reports (live later this month: radiology reports)	HL7
UMass Memorial Healthcare System	N/A	N/A
Vanguard Health Systems (Metrowest-Natick & Framingham and St. Vincent Hospital)	Lab, micro, path, bbk Results, Rad results, PACS images, dictated reports/textual notes, allergies, med list, adv directives	HL7, CCD
Wellport (Newburyport)	Lab, micro, path, bbk results, Rad Results	HL7

Table A.2.2.1: Existing Health Information Exchanges[10]

As noted in Table A.2.2.1 above, the majority of HIEs in the Commonwealth are at the community level, however, they will be leveraged to develop a statewide HIE. The primary focus of funding available in the Commonwealth will be for development of the statewide HIE.

[10] Massachusetts August 2010 Health Information Exchange Strategic and Operational Plan v2.7.9.

HIE Challenge Grants

Massachusetts was awarded supplemental funding for State Grants to Promote Health Information Technology under the Health Information Exchange Challenge Program on January 27, 2011. The Health Information Exchange Challenge Program encourages breakthrough progress for nationwide health information exchange in five challenge areas identified as key needs:

Theme 1: Achieving health goals through health information exchange

Theme 2: Improving long-term and post-acute care transitions

Theme 3: Consumer-mediated information exchange

Theme 4: Enabling enhanced query for patient care

Theme 5: Fostering distributed population-level analytics

MeHI was awarded 3.4 million in funding their submission of proposals for Themes 2 and 5. The Theme 2 project, entitled Improving Massachusetts Post-Acute Care Transfers (IMPACT), has the goal of connecting post-acute providers to hospitals and physician offices. The Massachusetts state Quality Improvement Initiative was responsible for developing the Massachusetts Strategic Plan for Care Transitions, and this project will support one of the action steps identified in the plan – development of a paper version of the Universal Transfer Form, the first step in the IMPACT project plan. The project will also leverage the experience and relationships the team leadership and stakeholders have developed from working on existing multi-stakeholder care transition improvement projects.

The grant will enable Massachusetts to focus on transitions of care between acute care facilities, nursing facilities, home health agencies and patient-centered medical homes in Worcester County. The inclusion of a broad array of providers recognizes the fact that many problems occur in the current healthcare system, where ineffective handoffs can result in harm to a patient and increased healthcare expenses. The grant will also provide Massachusetts with the ability to support varying levels of technology available within each participating organization and align with the state's Health IT and HIE action plans.

The Theme 5 project will build upon work currently underway by the Massachusetts Department of Public Health and Harvard Medical School's Department of Population Medicine (DPM), and will create a population-based surveillance network, Massachusetts Department of Public Health Net (MDPHNet), targeting a broad array of health indicators across multiple providers and delivery systems. An integrated, population-based, electronic surveillance system will provide the Massachusetts Department of Public Health with a richer view of health in the state, and will better identify disparities and priority areas for intervention, while providing more detailed and immediate data to inform public health policies.

A.3 The HIT Landscape

This sub-section describes the HIT landscape and its many components. This includes the organizations, related initiatives and grants, systems and standards.

The Commonwealth is involved in a number of HIT activities that impact all Massachusetts citizens including MassHealth members, providers, other state agencies and partners across the State. Successful deployment of Health Information Technologies both within EOHHS and across the Commonwealth has the potential to improve the quality, efficiency and access of healthcare services provided to Massachusetts citizens. EOHHS in collaboration with MeHI has started to leverage existing resources to extend the HIT infrastructure to Medicaid providers who adopt, implement or upgrade to certified EHR technology and choose to participate in a future statewide HIE that will create a "network of networks" amongst Commonwealth providers.

Currently in Massachusetts, the adoption of HIT across hospital organizations, private practitioners, dentists and community health organizations varies based on the geographic and demographic differences that exist across the State. Many hospital and larger healthcare organizations have realized the benefits of using technology standards such as Health Level 7 (HL7) standards and Health Insurance Portability and Accountability Act (HIPAA) Electronic Data Interchange (EDI) transactions to expedite the sharing of clinical data and the payment of healthcare claims.

MassHealth continues to encourage its providers to move away from using paper claims and other paper forms and aggressively adopt computer systems and electronic records to track healthcare delivery and provider payments. Chapter 305 requires hospitals to use EHRs and doctors to demonstrate competent use EHRs by 2015. This same law also mandates hospital use of Computerized Physician Order Entry (CPOE) systems by October 1, 2012. Providers have already invested money into the development and ongoing operation of Electronic Medical Records (EMRs). These records are normally managed at the hospital or practitioner's site and are not standardized. However, EMRs have recently become the focus of ongoing Federal and State healthcare improvement and cost containment initiatives.

A.3.1 HIT-Related Transformation

Massachusetts has received $24 million in federal ARRA grants to support HIT initiatives throughout the state. EOHHS is working closely with MeHI and other entities to coordinate and align these and Health Resources and Services Administration (HRSA) grant activities across multiple projects. For example, nurse managed health centers are expected to receive HRSA grant money to support the training of the nursing workforce. In June 2010, Boston Medical Center's HealthNet received a HRSA grant to help networks of health centers adopt electronic health records and other health information technology systems. Additionally, grants to promote the community health workforce to foster positive health behaviors and outcomes in medically underserved areas are expected to be administered across the state. These grant monies are in addition to grant money that EOHHS regularly applies for each year. EOHHS and MeHI are reviewing each of the available grants to determine how best to coordinate these related HIT/HIE initiatives.

MeHI received initial state funding of $15 million through Chapter 305. In addition, the HITECH Act provides funding to the IOOs in Massachusetts that will assist and support providers in achieving meaningful use of interoperable EHRs. Funding will support the creation of RECs to provide direct assistance best practices and tools to assist providers' meaningful adoption of EHRs. In February 2010, MeHI, as the designated REC, was awarded a federal grant of $13.4

million in funds for the first two years of an expected four-year contract, to support 2,500 priority providers. The REC currently has one of the top five highest provider enrollments in the country and has been recognized by ONC for its vendor selection model, as well as other best practices. As of February 1, 2011, REC had signed up over 2,000 providers.

The HITECH Act provides funding to states to administer incentive payments to Eligible Professionals and hospitals for efforts to adopt, implement or upgrade and become meaningful users of certified EHR technology. The Act also provides incentive payments in subsequent years for continued meaningful use. Furthermore, the Act will provide funding to States for activities related to administering the incentive payments to providers, auditing and monitoring of payments and participating in statewide efforts to promote interoperability and meaningful use. The total amount of funding to the state will be determined with the approval of the SMHP and subsequent Implementation Advance Planning Document (IAPD).

The Medicaid incentives will provide up to $63,750 over a six-year period to Eligible Professionals (EPs) to promote the adoption and meaningful use of EHRs. These incentives are available only to those EPs serving a specified percentage of Medicaid or Needy Individual patients (20-30% of their total patient population, depending on provider type.) If an EP serves a multi-state population they can participate only in the Medicaid incentive program through a single State in any payment year. EPs who furnish 90% or more of their covered professional services in an inpatient hospital or emergency room of a hospital are excluded from participating in the incentives.

However, Medicaid providers practicing predominantly in an FQHC or RHC are not subject to the hospital-based exclusion. EPs who participate in the Medicaid incentive program must waive their right to a Medicare incentive, however, they are allowed a one-time-only-switch between programs prior to 2015. Eligible hospitals which for the Medicaid incentive program include acute care hospitals, critical access hospitals, cancer hospitals and children's hospitals may participate in both Medicaid and Medicare Incentive Payment Programs in a payment year. If they are determined to be meaningful users by CMS they are deemed eligible for Medicaid incentives. The incentive payment amount for eligible hospitals is determined by the formula (Medicaid Share X Aggregate EHR Amount). Section E.2.6.3 (Expectations Regarding Provider Participation in the Medicaid EHR Incentive Payment Program) includes additional detail on the number of EPs and Hospitals expected to be eligible for the Medicaid EHR Incentive Payment Program.

A.3.2 CHIPRA Grant Status and Robert Wood Johnson Foundation Enrollment Initiative

On February 4, 2009, the President signed into law the Children's Health Insurance Program Reauthorization Act of 2009 (CHIPRA) (Pub.L. 111-3). The CHIPRA seeks to improve access to and the quality of care provided to children. In particular, Title IV of CHIPRA creates a broad quality mandate for children's healthcare and authorizes healthcare quality initiatives for both the Children's Health Insurance Program (CHIP) and Medicaid programs. Section 401(d) of CHIPRA provides for the grants to no more than 10 States "to evaluate promising ideas for improving the quality of children's healthcare" under Medicaid or CHIP, including projects to:

- Experiment with and evaluate the use of new measures for quality of Medicaid/CHIP children's healthcare;
- Promote the use of HIT for the delivery of care for children covered by Medicaid/CHIP;
- Evaluate provider-based models which improve the delivery of Medicaid/CHIP children's healthcare services; or

- Demonstrate the impact of the model Electronic Health Record format for children (developed and disseminated under section 401(f)) on improving pediatric health and pediatric healthcare quality, as well as reducing healthcare costs.

On February 22, 2010, CMS awarded a total of $20 million in first-year CHIPRA Quality Demonstration Grant funds to 10 states: Colorado, Florida, Maine, Maryland, Massachusetts, North Carolina, Oregon, Pennsylvania, South Carolina and Utah. Eight of the 10 grantees will test a recommended set of child health quality measures, seven of the ten states will use the funds to implement HIT strategies and two states specifically plan to test a new pediatric electronic health record format being developed under CHIPRA.

Under the auspices of its CHIPRA Quality Demonstration Grant, EOHHS, along with its grant partners, Children's Hospital Boston, Massachusetts Health Quality Partners, the National Initiative for Children's Healthcare Initiative and the University of Massachusetts Medical School, are undertaking an initiative to collect report and test a set of CMS-approved pediatric quality measures. These measures will be available for voluntary reporting by Medicaid programs nationally. As the work of the CHIPRA grant proceeds, the CHIPRA grant project team and the MassHealth HIT Steering Committee will coordinate on activities designed to best align the data collection and reporting efforts under HIE and the collection and reporting of the core pediatric quality measures.

In early FY2012, Massachusetts will convene a task force comprised of members of the EOHHS/MassHealth HIT Steering Committee, including the CHIPRA Grant Project Director and IT staff to begin to develop strategies to support the electronic submission by providers through their EHRs of all required data associated with the MU CQMs beginning in 2013.

MassHealth plans to use MAPIR to monitor meaningful use once it is released to participating states. MAPIR will collect provider attestations for meaningful use, numerators and denominators to determine necessary participation thresholds, and Clinical Quality Measures (CQMs). To the extent there is overlap between the meaningful use CQMs and the list of CMS-approved core measures, there will be an opportunity to align the work of Massachusetts' CHIPRA Quality Demonstration Grant and the Medicaid EHR incentive program.

In early 2011, Massachusetts will convene a task force comprised of members of the EOHHS/MassHealth HIT Steering Committee, including the CHIPRA Grant Project Director, to begin to develop strategies to support the electronic submission by providers of numerator and denominators associated with the MU CQMs in 2012. In this work, the task force can determine the extent to which MAPIR functionality can be leveraged to support other provider data collection activities, including collection of the CHIPRA core measures.

Table A.3.2 below shows the major HITECH and CHIPRA grants awarded to the Commonwealth:

HITECH, CHIPRA and other related HIT Grants as of October 2010		
Purpose	**Federal Funding Source**	**Grant Amount**
Massachusetts EOHHS/MassHealth-Approval of PAPD for State Medicaid HIT Plan Development and Incentive Program	CMS	$4 Million
Massachusetts Technology Collaborative/ Massachusetts eHealth Institute - Regional Extension Center (REC) Grant	ONC	$13.4 Million
Massachusetts Technology Collaborative/ Massachusetts eHealth Institute-HIE Planning	ONC	$10.6 Million
Massachusetts Technology Collaborative /Massachusetts eHealth Institute - Regional Extension Center Grant-to support Critical Access and Rural Hospitals	ONC	$132,000
MassHealth, Children's Hospital, Massachusetts Health Quality Partners and National Initiative for Children's Healthcare Quality - CHIPRA Quality Demonstration Grant	HHS-Center for Health Policy and Research	$8.77 Million
Massachusetts Technology Collaborative /Massachusetts Broadband Institute and Massachusetts Department of Conservation and Recreation (DRC) - NTIA Broadband Technologies Opportunities Program (BTOP)	NTIA	$45 Million

Table A.3.2: HITECH, CHIPRA and Other Related HIT Grants as of October, 2010[11]

In addition, the Commonwealth was one of eight states awarded a four-year $1 million grant from the Robert Wood Johnson (RWJ) Foundation in February 2009. The intent of the award is to maximize enrollment of children. The award will help assist the Commonwealth by funding an independent, diagnostic assessment of its policies and procedures to help the Commonwealth better understand how to increase enrollment and retention in the Children's Health Insurance Program.

A.3.3 HIT/HIE Activities across State Borders

EOHHS regularly participates in discussions relative to leveraging HIT/HIE activities that are underway in neighboring states and in states that use similar Medicaid Management Information Systems (MMIS). Discussions with states that have recently implemented Hewlett Packard's (HP) Enterprise interchange solution are of specific interest. Massachusetts is also a long-time member of the New England States Consortium of Systems Organizations (NESCSO), formed in the mid-1990s, which, among other issues, focuses on collaborating on issues pertinent to eHealth and MMIS activity in the New England region.

[11] Information provided by the MassHealth EOHHS Project Manager

A.3.3.1 New England States Consortium of Systems Organizations (NESCSO)

NESCSO meets monthly to share information and best practices and identify HIT priorities among participating New England states: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and a partnership with New York. Group members include Health IT coordinators, Medicaid agencies, HIE organizations and universities. As a result of these meetings, many states in this group, including MA, have signed a Memorandum of Understanding to seek out opportunities to collaborate on projects that represent mutual value. This group is also exploring a planning project and implementation project. These projects represent opportunities to promote inter-state HIE integration with Medicaid and the evolving Medicaid Information Technology Architecture (MITA). The NESCSO scope includes the State designated entities that are working on statewide Health Information Exchange which includes state agencies, quasi-public agencies, non-profits and other organizations.

NESCSO is developing a regional data warehouse to provide New England states the ability to conduct timely comparative analyses for the effective and efficient administration of the states' Medicaid State Plans and to support the regional initiatives of NESCSO members. In collaboration with the University of Massachusetts Medical School, NESCSO is creating this tool to facilitate informed business decisions and the exchange of Medicaid business information within the New England region. The design of the NESCSO data warehouse is based upon the Universal Data Warehouse model which is already widely adopted. It is easily customized to match an individual State's requirements and designed for easy reporting with standard tools. NESCSO members have the ability to access standard reports, graphic dashboards, data extracts for graphing and a Business Intelligence (BI) solution for online data analysis. NESCSO is working with each of its members to securely transfer and update MMIS claims data into the warehouse system.

NESCSO members agree that provider identification and authentication across state boarders is a critical need and is proposing a master provider directory service available via the internet employing standardized data interfaces to all the major certified EHR systems, operating HIEs (VT, ME, NY, MA and others as they go live), MMIS systems and All-Payer Claims database systems. This provider directory will give Medicaid, HIEs and healthcare providers the ability to look up, reference and send continuity of care documentation and administrative information. The directory will include matching algorithms to ensure electronic identification, matching and standardization of such provider information as name, physical location(s), billing location(s), specialty, business affiliation(s) and electronic routing.

A.3.3.2 Medical Assistance Provider Incentive Repository Multi-State Collaborative

Within a multi-state collaborative, the Commonwealth of Pennsylvania's Office of Medical Assistance Programs (PA OMAP) has taken the lead with HP Enterprise Services to build a new incentive payment application that will support participating states' implementation and administration of the Medicaid EHR Incentive Payment Program. This will allow providers to complete Medicaid EHR Incentive Payment Program applications and, if approved, generate incentive payments. This application is known as the Medical Assistance Provider Incentive Repository (MAPIR).

The Multi-State Collaboration currently includes: Arkansas, Connecticut, Delaware, Florida, Georgia, Indiana, Kansas, Oregon, Pennsylvania, Rhode Island, Wisconsin and Vermont in addition to Massachusetts. These states joined together in an effort to gain economies of scale in base system costs and assist HP in developing a core MAPIR product that would be customized to meet the needs of each participating State. Massachusetts customizations will

begin after the May release of core MAPIR product. The Pennsylvania IAPD was approved by CMS for the core MAPIR product in November 2010 on behalf of the 13 states within the collaborative. Massachusetts will include its costs of MAPIR integration, customization and change orders in an IAPD.

MAPIR

MAPIR is a web-based software product that will interface with the state's NewMMIS for provider enrollment and claim information, create transactions for payment within the NewMMIS and store payment information. MAPIR will interface with the CMS R&A to coordinate provider registration and payment information and is designed to be a link between the CMS R&A and the NewMMIS. MAPIR is being designed to assist in provider enrollment, claim information, create transactions for payment within the NewMMIS and store EHR incentive payment information such as EFT data, payment date and the state from which payment was received. Tracking of subsequent payment years, including meaningful use will be addressed in later versions of the MAPIR software.

EOHHS has opted to utilize the MAPIR which will link with the state's Medicaid Management Information System and with the CMS R&A, to collect registrations from EPs and hospitals and to guard against duplicate payments. In Massachusetts, Providers will be able to access the MAPIR system via a Web-based portal and enter required information and attestations. MeHI EVOT personnel will use MAPIR to track application and decision status, attach notes and documents to provider records and generate electronic provider correspondence.

Through MAPIR providers will be able to submit and validate applications for EHR payments as well as track those payments. MAPIR will also provide limited functionality to record instances where an appeal of denial of eligibility or payment is made. MAPIR consists of five separate development tracks that correspond to specific system functions. They are:

1. **CMS R&A Data Exchange:** Send/Receive CMS R&A data, Receive EHR Certified ID from ONC, Include Payment Data in the CMS R&A File; Receive Payment Data from the State.
2. **NewMMIS Data Exchange:** Approve Payments for Issuance by the NewMMIS/ Management Accounting and Reporting System (MARS), Send Payment Data to CMS R&A.
3. **Portal Integration:** Integrate for Internet and Intranet users, Provide Email Notification to Providers about their Eligibility and Payments (in Massachusetts these notifications will need to be made paper-based), Administrative functions for the State users and the ability to generate reports.
4. **Professional Provider:** Verify provider applications, allow providers to complete their attestation, determine eligibility, process their payment and keep track of any ongoing appeals processes.
5. **Hospital Provider:** Verify hospital-based provider applications, allow hospital-based providers to complete their attestation, determine eligibility for hospital-based providers and process their payments and keep track of any ongoing appeals processes for Hospital-based providers.

The Medicaid EHR Incentive Program will make incentive payments to Eligible Professionals and eligible hospitals as they adopt, implement, upgrade, or demonstrate meaningful use of certified EHR technology in their first year of participation and demonstrate meaningful use for

up to five remaining participation years. To support the Medicaid EHR Incentive Payment Program, MAPIR will be used to collect provider enrollment and claim information and to create transactions for payment within the NewMMIS and Massachusetts Management Accounting and Reporting System (MMARS) systems.

A.3.4 Medicaid Enterprise

The Medicaid Enterprise consists of: the NewMMIS Base Application, Provider Online Service Center, Massachusetts Management Accounting and Reporting System, Virtual Gateway and MAPIR. The NewMMIS is the information retrieval and claims processing system which is used to process Medicaid claims, manage member eligibility and maintain information on healthcare service providers across the State. EOHHS completed implementation of its “NewMMIS” in May 2009 and processes approximately $8 billion in Medicaid claims payments and managed care capitation payments annually. The NewMMIS allows the Commonwealth flexibility to creatively design and support programs and initiatives to improve care and contain healthcare costs.

MassHealth will share data from the NewMMIS over the statewide HIE in a standard agreed-upon format when the data is used to promote care coordination for MassHealth members and/or transmitted to achieve eligible professional or eligible hospital meaningful use requirements. Upholding HIPAA and ARRA security standards for the receipt and transmission of the health information is a priority for EOHHS, MeHI and stakeholders participating in the statewide HIE. In line with security precautions, the NewMMIS solution follows EOHHS’s Information Technology Architecture vision of an enterprise-wide, web services driven, information utility model based on a service-oriented architecture. NewMMIS applications are accessed via the EOHHS-wide Virtual Gateway portal (VG) and utilize the single-sign-on Access and Identity Management System (AIMS) for security.

NewMMIS: Environment Components

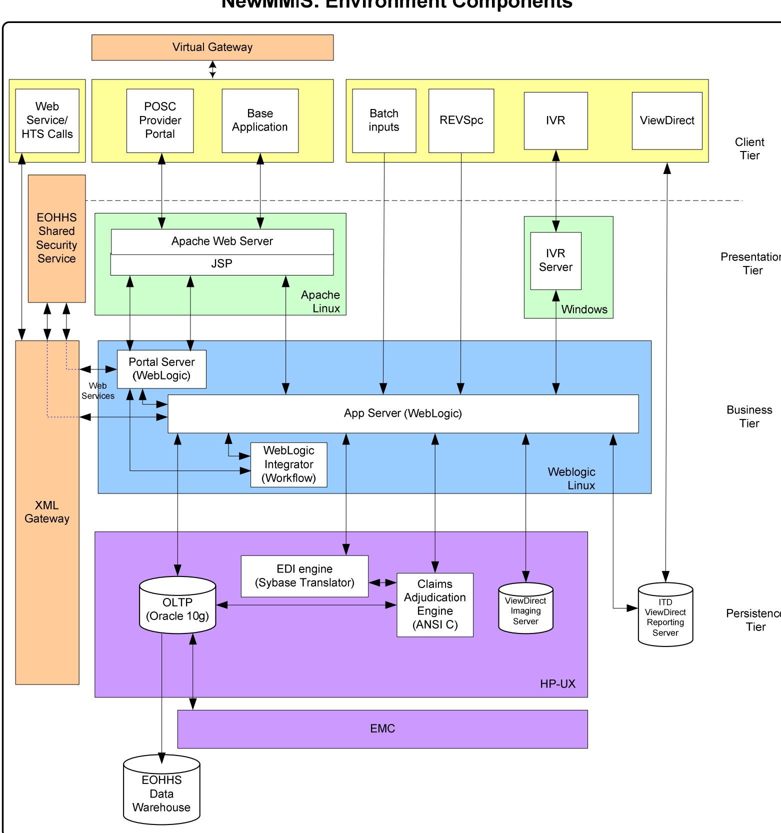


Diagram A.3.4: NewMMIS Environment Components[12]

The Provider Portal, as depicted above in Diagram A.3.4, is known as the Provider Online Service Center (POSC). The portal can also be accessed directly on the web and provides functionality to provider users for enrollment, eligibility verification, service authorization, claims, provider profile maintenance, etc. This functionality is accessed from the base application via web services. The portal is based on (portal) and J2EE technology and runs on WebLogic Portal (WLP) servers in a clustered Linux environment. Both the base and portal application server clusters are proxied by load-balanced Apache servers and fronted by a Cisco CSM for load-balancing.

The persistence tier contains the ‘C’ based claims engine, runs on HP-UX and is central to the claims adjudication process for the Massachusetts Medicaid program. In addition to the claims engine services, the NewMMIS also has other interactive services such as the eligibility verification and claim inquiry, which are made available by the NewMMIS Simple Object Access Protocols (SOAP) server and are accessible to other applications via SOAP. The claims engine is supported by a Sybase translator running on HP-UX that performs compliance checks on EDI X12 transactions and translates these to XML. This tier also houses the Online Transaction Processing (OLTP) Oracle 10g database and is used by both the NewMMIS Claims Engine and the J2EE maintenance application to store application and business information.

The batch processing components are written in ‘C’, run on HP-UX and use embedded SQL for persistence. These programs are executed by Unix shell ‘job scripts’ that are scheduled, controlled, executed and monitored by the Cybernation software. Specific batch tasks in the J2EE environment are executed using the Quartz job scheduler. Operational reports for day-to-day business are produced out of the NewMMIS OLTP database and are generated from batch

[12] NewMMIS Logical Architecture Document

processes. Small web-based reports generated by queries out of the J2EE Base application are done using Jasper Reports. Extract-based reports for management analysis and Ad-Hoc reports generated at any time by queries are produced out of the EOHHS Data Warehouse.

Diagram A.3.4 below depicts the relationships between the NewMMIS components and other enterprise components such as the enterprise XML Gateway used to facilitate communications between different components of EOHHS, Public Health and Medicaid systems. Also shown are the key layers of the NewMMIS solutions and all components and services that form part of the NewMMIS J2EE application. The NewMMIS application layers work in concert with the NewMMIS enterprise architecture to ensure EOHHS security and privacy policy, along with roles based security and data access accounting policies, are upheld. As the HIT/HIE solution is developed, these components of the NewMMIS and related systems and application standards will be integrated into the solution.

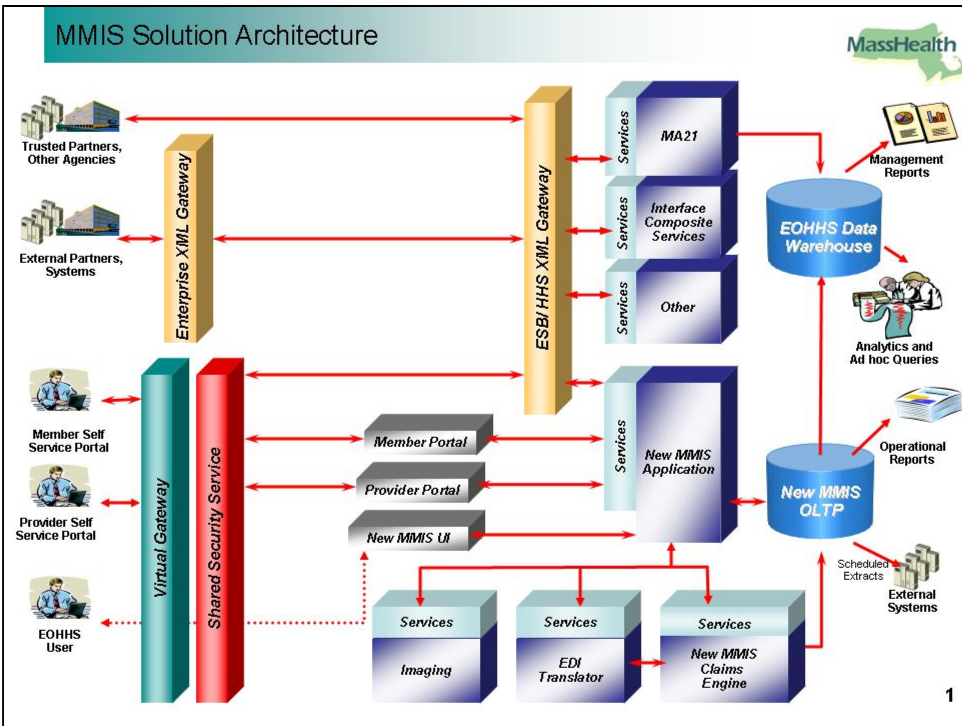


Diagram A.3.4: NewMMIS Enterprise Architecture Overview[13]

The NewMMIS interfaces with other state agencies that request member, provider, or claims data either interactively or as scheduled batches. Web Services, using WSDL, are available to provide data interactively. Batch requests are pre-defined batch jobs that are executed and monitored by the batch scheduling software and provide data appropriately. The NewMMIS also makes available specific services such as web services to external entities via the Enterprise and EOHHS XML Gateway appliances. There is an Integrated Voice Response (IVR) component that uses some of the web services to provide functionality to a subset of users that call-in.

Interface Channels

The NewMMIS has made extensive use of Web services. Web services were developed to make available Member, Provider and Claims information. These services allow external

[13] July 2006. NewMMIS HTS Specification v1.0

applications with the appropriate security level to inquire against the NewMMIS data, providing much needed real-time access to member, provider and claims data. A Web service was developed to allow machine-to-machine transmissions of all documents that can be uploaded/downloaded via the web portal. And the member eligibility transactions are all submitted from EOHHS's sister agencies to the NewMMIS via the MA21 eligibility interface in real-time:

- **Commbridge Batch:** NewMMIS takes advantage of the existing infrastructure developed for sharing files between internal agencies. This method of batch file sharing is used in NewMMIS to transmit files between NewMMIS and the sister agencies, including MA21.
- **Secure File and Email Delivery (SFED):** NewMMIS uses the Commonwealth's own SFED product to transmit smaller batch files between a person within an agency and NewMMIS.
- **Connect Direct:** NewMMIS uses Connect Direct (previously known as NDM) as the software tool to transfer large batch files with five of the external entities (ACS, Doral, HMS, CST and CMS). In addition, the Connect Direct software product serves as the intermediary between the MAPIR data repository and the CMS R&A.

A.3.4.1 Provider Online Service Center

The Provider Online Service Center (POSC) which launched in May of 2009, offers MassHealth providers a Web-based environment that automates functions such as member eligibility verification, claim submission and status, claims processing, prior authorization, referrals, preadmission screening, online remittance advices and reports. To support the Medicaid EHR Incentive Payment Program, the NewMMIS will be used for provider enrollment and claim information and to create transactions for payment within the NewMMIS and the MMARS. The NewMMIS will utilize its existing interfaces with MMARS to complete payments approved within MAPIR and sent to the NewMMIS for payment. The POSC will be used in the Medicaid EHR Incentive Payment Program as the entry mechanism for Massachusetts-based providers to access the MAPIR application.

A.3.4.2 MMARS State Financial System

The Massachusetts Management Accounting and Reporting System (MMARS) is the Commonwealth's statewide budgetary control and general ledger system used by the Office of the Comptroller and with which the NewMMIS exchanges payment information. All financial transactions generated from the NewMMIS including Medicaid EHR Incentive Payment Program payment transactions will pass through the MMARS for accounting purposes. MMARS includes accounting of accounts receivable, accounts payable and fund allocation for all NewMMIS transactions. As the Medicaid EHR Incentive Payment Program payments are processed through the NewMMIS they will be recorded in MMARS similar to other provider payments. Adjustments and void transactions processed against Medicaid EHR Incentive Payment Program payments will first be processed within the NewMMIS and subsequently recorded in MMARS. MMARS processing ensures that statewide fund allocation, state taxes and federal taxes are calculated and applied appropriately.

A.3.4.3 Virtual Gateway

The Virtual Gateway is an internet portal that has transformed how Massachusetts serves its Health and Human Services constituents and simplifies how residents find and access health and human services. The Virtual Gateway was designed by the Executive Office of Health and Human Services to provide the general public, medical providers, community-based organizations and EOHHS staff with online access to health and human services. By consolidating information and online services in a single location on the internet, the Virtual Gateway simplifies the process of connecting people to critical health and human services programs and information. Over 40,000 individuals representing more than 1,600 organizations use the Virtual Gateway to conduct business with agencies within EOHHS.

Technology enables government, the private sector and individual households to do more with less. The Virtual Gateway provides increased access to programs and information for EOHHS agencies, community partners and the public. In addition, the Commonwealth as a whole has more oversight and control, all with less time and effort.

The Gateway plays a major role supporting many of EOHHS' strategic initiatives:

- Common Intake makes it easy for residents to understand what benefits they may be eligible for, apply online and manage existing services. Since its launch in late 2004, over 570,000 applications have been received through the Common Intake service.
- Common Intake also plays a vital role in supporting Massachusetts Health Care Reform by enabling uninsured residents to apply online for MassHealth, Commonwealth Care and Health Safety Net programs.
- Enterprise Invoice Management standardizes and consolidates human service invoicing and contract management across eight agencies and over 500 community providers.
- The Senior Information Management System modernizes the delivery of critical care and services to Massachusetts seniors.

A.3.5 Medicaid Information Technology Architecture (MITA) SS-A

The mission of MITA is to establish a national framework of enabling technologies and processes that supports improved administration of the Medicaid program and healthcare outcomes for Medicaid beneficiaries. By establishing this framework, MITA seeks to move Medicaid information systems toward a greater focus on the beneficiary, integration of clinical and administrative data, support of program analysis and decision-making and an enhanced capacity for Medicaid to communicate with other programs and payers. In 2008 FourThought Group (4TG) completed a Gap Analysis on behalf of EOHHS, to identify areas that were lacking in the documentation necessary to conduct a State Self-Assessment (SS-A). In the Massachusetts MITA Gap Analysis Draft V1, 4TG identified:

- **The overall average Maturity Level for all MITA defined business areas is at a Level 1**: This means that EOHHS "focuses on meeting compliance thresholds for state and Federal regulations, aiming primarily at accurate enrollment of program eligibles and timely and accurate payment of claims for appropriate services."

- **The overall average capability Maturity Level of EOHHS for all MITA technical areas is at a Level 2:** This means that the EOHHS "is moderately aligned with optimal MITA system specifications using a combination of manual and electronic processes and some basic Service-Oriented Architecture Principles." While various aspects of the

Medicaid Enterprise operate at higher Maturity Levels using nationally recognized enterprise standards, the incomplete nature of the Technical Capabilities Matrix as defined in the MITA Framework 2.0 makes it difficult to achieve a higher Maturity Level.

4TG provided recommendations to EOHHS to address the gaps and move from the current estimated levels of maturity to a higher MITA level. Massachusetts recognizes that a complete MITA SS-A is needed to specifically address anticipated healthcare related change arising from the impact of HealthCare Reform. MassHealth is in the process of analyzing the impact of the new law on its programs. MassHealth's focus remains on continuous process improvements and fiscal agent oversight activities.

A.3.6 All-Payer Claims Database

Massachusetts, through its Division of Health Care Finance and Policy (DHCFP), maintains an All-Payer Claims Database (APCD). The database is being expanded and when fully developed it will be comprised of medical claims, dental claims, pharmacy claims and information from member eligibility files, provider files and product files that will include fully-insured, self-insured, Medicare and Medicaid data. It will also include clear definitions of insurance coverage (covered services, group size, premiums, co-pays, deductibles) and carrier-supplied provider directories. The result is a dataset that will allow for a broad understanding of cost and utilization across institutions and populations.

This database will provide accurate counts for the total number of active providers and the number of total patient encounters for each provider so that Medicaid patient thresholds can be verified by Medicaid EHR Incentive Payment Program verification and enrollment staff as required by federal SMHP guidelines. Currently, MassHealth has access to the number of Medicaid/1115 Waiver encounters for MassHealth participating providers and by January 2012, the Medicaid EHR Incentive Payment Program will have access to both the numerator and denominators for Medicaid patient threshold percentage calculations.

Some specific milestones of the APCD are:

- **April 2010:** DHCFP released draft regulations for collection and release of healthcare claims data; issued notice of public hearing;
- **May 2010:** DHCFP held a public hearing;
- **July 2010:** DHCFP adopted final regulations;
- **October 2010:** DHCFP collected self-insured data for cost trends analyses;
- **January 2011:** Healthcare payers will start submitting healthcare claims data to DHCFP for calendar years 2008, 2009 and 2010;
- **February 2011:** Payers will start submitting data on a monthly basis;
- **Summer 2011:** DHCFP will make data sets available for sister agencies to utilize and thereby reduce duplicative data requests; and
- **Fall 2011:** Files of data for public use and restricted use will be made available through an application process.

A.3.7 Pharmacy Online Processing System (POPS)

The Pharmacy Online Processing System (POPS) is a system that manages all of MassHealth's pharmacy claims and was implemented in 2001. POPS is currently in version 2.0, which is also referred to as POPS II. The next version of POPS is scheduled to go-live on January 1, 2012. POPS II receives pharmacy claims from multiple sources, adjudicates them in real time and sends adjudicated information to the NewMMIS. POPS is accessible 24 hours a day, seven days a week for online claims submissions and inquiries.

POPS is a standalone system and has several input systems, but primarily interfaces with the NewMMIS. With the exception of the drug and the drug Prior Authorization (PA) master files, many of the files required for processing are stub files, refreshed regularly with extracts from the current MMIS data file (*e.g.*, eligible members, enrolled providers). Some of the other critical files such as the Drug Enforcement Agency (DEA) file and the National Association of Boards of Pharmacy (NABP) file are received from external sources. POPS II is compliant with National Council for Prescription Drug Programs (NCPDP) 1.1 and 5.1.

The NewMMIS interfaces with POPS via the Connect Direct file transfer solution and is able to perform the following data exchanges with POPS:

1. Non-Pharmacy Claims to POPS
2. Member Data from MMIS to POPS
3. Relationship Entity data from MMIS to POPS
4. Adjudicated Claims from POPS to MMIS
5. TPL Carrier file data from MMIS to POPS
6. Check information from MMIS to POPS
7. Pharmacy Co-Pay File from POPS
8. Pharmacy Reversal file from POPS
9. Administrative Adjustments from POPS

A.3.8 Immunization Registry Interoperability with Public Health Surveillance

The Massachusetts Department of Public Health (MDPH) Immunization Program is committed to promoting the health of Massachusetts' citizens by reducing the burden of vaccine preventable diseases that affect the residents of the Commonwealth. As part of this effort, the Immunization Program is preparing to launch a statewide web-based immunization registry in 2011. Once fully implemented, the registry, known as the Massachusetts Immunization Information System (MIIS), will be the official source of immunization information for Massachusetts.

The goal of the MIIS is to give healthcare providers and families a tool to help ensure that all individuals are immunized based on the latest recommendations. The MIIS is the product of a skilled team of technical and public health experts who have spent the past three years building and testing the system. The team has designed the MIIS to serve the needs of electronic health record users through electronic "data exchange" and can also support the needs of non-EHR users through direct data entry. The primary benefits of the MIIS are:

1. **Shared immunization records:** Records will be available across multiple sites and locations to help identify under-immunized children and pockets of unmet need;

2. **Better decision-making:** Practices, schools and electronic health record systems will be able to increase on-time delivery and reduce inappropriate immunization by using advanced immunization forecasting decision support;
3. **Reduced waste and increased efficiency:** Vaccine administration will be monitored and assessed on an ongoing basis to optimize distribution and use; and
4. **Enhanced disease control:** The MIIS will be integrated with the Massachusetts Department of Public Health infectious disease monitoring systems to allow the linkage of disease surveillance with the immunizations designed to prevent them; improved disaster preparedness by providing an essential infrastructure for responding to natural disasters, bioterrorism events, influenza pandemics and other emergencies.

In addition to this critical public health role, the MIIS directly enables healthcare providers to meet one of three core public health “meaningful use” objectives as defined by the HITECH act. These three objectives are the ability for healthcare providers to electronically submit data regarding 1) immunization information, 2) electronic laboratory results for reportable disease and 3) syndromic surveillance data. The MIIS also allows providers to meet two additional “meaningful use” objectives: generating lists of patients with specific conditions and sending reminders to patients for preventative/follow up care. As the primary MDPH mechanism for electronic exchange of immunization information, the MIIS represents a key initiative to support Health Information Exchange, Meaningful Use, and the initiatives of the HITECH act.

The MIIS is comprised of four technical components: 1) a centralized HL7 Gateway for electronic messaging, 2) an Access and Identity Management Service for security protection and data encryption, 3) a core back-end database and web application, and 4) a web service based Immunization Forecasting Module (IFM). Together, this infrastructure can accept data from existing Electronic Health Record (EHR) systems in real-time, is compliant with national and state IT standards and supports the “meaningful use” technical guidance including the HL7 2.5.1 messaging standard.

A.3.9 Security and Data Standards

Privacy and security controls, policies and standards around information security, data protection and user access management must align with federal and state laws and regulations that govern privacy and security requirements for protected health information. The Massachusetts Ad-Hoc Privacy and Security Workgroup provides advice and recommendations to the HIT Council and MeHI, as needed, in the review of these federal and state-specific laws and regulations. The role of the Commonwealth is to ensure that there is a set of Massachusetts privacy and security standards that are consistent and in line with federal and state laws, so the Massachusetts community can continue to deploy EHRs and HIEs that are interoperable on both the state-wide and national level.

A.3.9.1 National Standards

The Nationwide Health Information Network (NHIN) is being developed to provide a secure, nationwide, interoperable health information infrastructure that will connect providers, consumers and others involved in supporting health and healthcare. This critical part of the national health IT agenda will enable health information to follow the consumer, be available for clinical decision-making and support appropriate use of healthcare information beyond direct patient care so as to improve health.

The NHIN seeks to achieve these goals by:

- Developing capabilities for standards-based, secure data exchange nationwide;
- Improving the coordination of care information among hospitals, laboratories, physicians offices, pharmacies and other providers;
- Ensuring appropriate information is available at the time and place of care;
- Ensuring that consumers' health information is secure and confidential;
- Giving consumers new capabilities for managing and controlling their personal health records as well as providing access to their health information from electronic health records (EHRs) and other sources;
- Reducing risks from medical errors and supporting the delivery of appropriate, evidence-based medical care; and
- Lowering healthcare costs resulting from inefficiencies, medical errors and incomplete patient information.

The ONC is advancing the NHIN as a "network of networks" which will connect diverse entities that need to exchange health information, such as state and regional health information exchanges integrated delivery systems, health plans that provide care, personally controlled health records, Federal agencies and other networks as well as the systems to which they, in turn, connect. The core capabilities of the NHIN establish an interoperable infrastructure among distinct networks and systems that allows for different approaches and implementations, while ensuring secure information exchange as needed for patient care and population health.

A.3.9.2 NewMMIS Standards

NewMMIS allows providers to send and receive HIPAA-Compliant Electronic Data Interchange (EDI) transactions over the Internet through the use of standards-based SOAP Messaging Services. Massachusetts' version of the HealthCare Transaction Services Specification was originally developed by Harvard Pilgrim Health Care (HPHC) and later adapted. This environment contains ANSI/ISO X.12 healthcare service provision and payment information.

The following HIPAA transaction sets are supported in the NewMMIS:

- 270/271 Eligibility Request and Response;
- 276/277 Claim Status Request and Response;
- 278 Prior Authorization;
- 820 Premium Payment;
- 834 Benefit Enrollment and Maintenance;
- 835 HealthCare Claim Payment/Advice;
- 837 Professional/Inpatient/Outpatient/Dental; and
- 997 Functional Acknowledgement.

A.3.9.3 Massachusetts Standards

Effective January 1, 2009, Executive Order 504 establishes new requirements designed to adopt and implement the maximum feasible measures reasonably needed to ensure the security, confidentiality and integrity of personal information and personal data, that is maintained by state agencies. This requirement only pertains to contracts that require the Contractor's access to personal information owned or controlled by the contracting agency and systems that contain such data.

The Executive Order applies to all state agencies in the Executive Department, including all executive offices, boards, commissions, agencies, departments, divisions, councils, bureaus and offices, now existing and hereafter established. In order to comply with the contractor certification requirements of Executive Order 504, agencies must require that all vendors executing contracts on or after January 1, 2009, certify compliance with applicable security measures.

In November 2009, the Massachusetts Office of Consumer Affairs and Business regulation issued 201 CMR 17:00, a regulation for the protection of personal information of Massachusetts residents with a March 1, 2010, deadline for full compliance. The regulation states that any person that receives, stores, maintains, processes or otherwise has access to personal information acquired in connection with employment or with the provision of goods or services to a Massachusetts resident has a duty to protect that information. A "person," for purposes of the regulation, may be an individual, corporation, association, partnership or other legal entity.

Personal information includes a surname, together with a first name or initial, in combination with one or more of the following three data elements pertaining to that person: Social Security Number; driver’s license or state-issued identification card number; or financial account or credit or debit card number, with or without any other data element, such as a code, password, or PIN, that would permit access to the person’s financial account.

In order to safeguard this data CMR 17:00 requires that the person develops and maintains a comprehensive Written Information Security Program (WISP) to safeguard such information. If the person electronically stores or transmits personal information, the WISP must include a security system covering the person’s computers and any portable and/or wireless devices. Safeguards should be appropriate to the size, scope and type of the person’s business, to the person’s available resources, to the amount of stored data and to the need for security and confidentiality of consumer and employee information.

Massachusetts also leverages an Enterprise Technical Reference Model (ETRM) that provides an architectural framework used to identify the standards, specifications and technologies that support the Commonwealth's computing environment. The ETRM identifies both the current state and the target state of the Commonwealth's computing environment. Ongoing implementation of the target state identified within the ETRM will result in a Service-Oriented Architecture (SOA) for the Commonwealth that uses open standards solutions where appropriate to construct and deliver online government services.

A.4 Factors Related to EHR Adoption

This sub-section describes the current status of EHR adoption in the Commonwealth and the various components that contribute to this level of adoption. Among these include facilitation efforts, access to broadband in the state, state law or regulations that impact EHR Incentives and other activities.

MassHealth will play a key coordination role with MeHI to promote and facilitate the adoption of EHR and the Statewide HIE. Communication barriers exist such as minor broadband access disparities across the state. Like most states, Massachusetts has greater access in more urban areas than in rural parts of the state. While any individual provider can implement an EHR system internal to the organization, the ability to participate in an exchange network is limited or impossible if broadband access is unavailable or unreliable.

Along its path to healthcare reform, the Commonwealth recognized the critical role Health Information Technology can play in supporting healthcare reform initiatives. This recognition was confirmed with the state legislature's passage of Chapter 305 in 2008 and in the 2009 roadmap to cost containment issued by the Health Care Quality and Cost Council. The state is also embarking on several initiatives to address the healthcare disparities among racial and ethnic groups and between the poor and non-poor, including the transformation of all primary care practices to patient-centered medical homes by 2015, reduction of preventable hospital admissions and readmissions, improvement of care transitions and movement of the payment system away from a predominant fee-for-service system to one of global payments.

A.4.1 Facilitation of EHR Adoption

MassHealth will play a key coordination role with MeHI to promote and facilitate the adoption of EHR and the Statewide HIE. By collaborating with MeHI and other entities in both the public and private sectors, MassHealth will play an important role as both a payer and collaborator to assist Massachusetts in achieving the desired impact on patient safety and quality of the healthcare system. As the Regional Extension Center (REC) for the Commonwealth, MeHI has received federal funding under the State Health Information Exchange Cooperative Agreement Program to serve as the single Regional Extension Center for the entire state. As the state's REC, one of MeHI's primary purposes is to support and facilitate EHR adoption and healthcare providers who adopt an electronic health record system to help them achieve meaningful use. The REC offers access to financial services, listings of approved vendors and other services to help providers optimize their EHR to meet national standards.

In addition, through a federal grant the REC will assist 2,500 priority Eligible Professionals to install EHRs and serve as a resource for Medicaid financial incentives. Massachusetts expects to enroll these providers by January 2011. As of November 2010, 1,195 providers have begun the enrollment process with the REC in preparation of receiving federal grant money. The REC will also offer ongoing support and education for all healthcare providers in the Commonwealth, including federally qualified health centers, community health centers and critical access and public hospitals. The enrollment with the REC for these grants, to assist providers to adopt and purchase EHRs, is a separate and distinct process from the Medicaid EHR Incentive Payment Program provider enrollment activities that MeHI will support once Medicaid EHR Incentive Payment Program is operational in Massachusetts. The following diagram identifies the provider enrollment process as defined by MeHI.

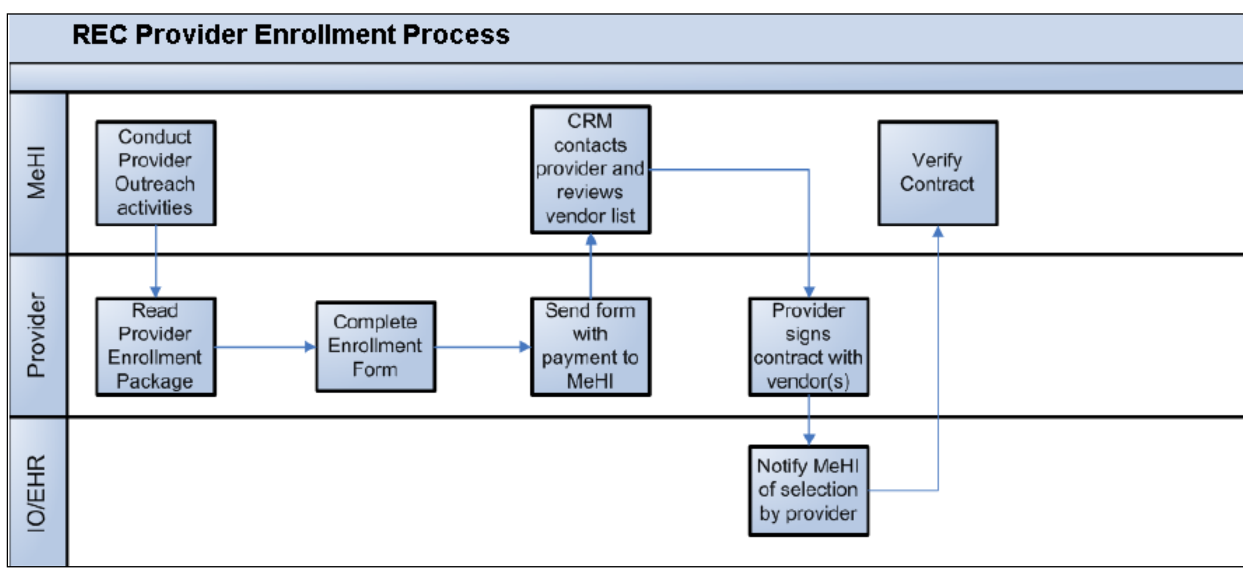


Diagram A.4.1: REC Provider Enrollment Process[14]

Massachusetts supports Commonwealth stakeholders by the use of Implementation Optimization Organizations. IOOs will deliver Health IT services that will directly assist providers in the adoption and meaningful use of certified EHRs within the physician offices. $12.5 million in federal funding will be distributed by MTC/MeHI to approved IOOs to support providers which will help underwrite the costs of IOO implementation services. Direct Assistance payments to providers will be made in stages, as predefined milestones are met. MeHI believes this model provides unique benefits and efficiencies; it will permit the Commonwealth to harness the services of all of the highly experienced IOOs in the State simultaneously, thus accelerating the goal of statewide EHR adoption.

MeHI has entered into agreements with approved Implementation and Optimization Organizations to deliver Health IT services that will support adoption and meaningful use of certified EHRs within the physician offices. The IOOs will in turn contract with providers to offer a full range of adoption and meaningful use support services, including clinical and technical implementation. Once providers are operational, the IOOs will recommend them as compliant with Chapter 305 and eligible for participation in the Statewide HIE. This model provides unique benefits and efficiencies, as it will permit the Commonwealth to harness the services of all of the highly experienced MeHI approved IOOs in the state simultaneously, thus accelerating the goal of statewide HIT adoption.

To promote EHR adoption to both public and private stakeholders regarding the Commonwealth's plan is a critical element of the SMHP. A Communication and Marketing Plan was developed cooperatively between MeHI and MassHealth to create a framework and strategy for the activities and methodologies that will be used to help ensure the Medicaid EHR Incentive Payment Program is visible, easily understood and adoptable by the Commonwealth's providers. These plans identify critical components of the outreach and Provider education activities that need to occur to support the Medicaid EHR Incentive Payment Program. The Commonwealth will successfully communicate the incentives and requirements of the Medicaid EHR Incentive Payment Program through a broad range of communication methods. Full execution of the communication plan will enable Eligible Professionals to make educated and informed decisions regarding the benefits and advantages of participating in the Medicaid EHR

[14] September 2010, Electronic Health Record Vendor and IOO Orientation.

Incentive Payment Program in Massachusetts. The plan will also reach MassHealth eligible consumers with critical information on the benefits of EHRs.

The overarching goal of the Communication and Marketing effort is to recruit greater than 85% of eligible healthcare professionals to leverage the incentives that will enable implementation of EHR systems. A secondary goal is to utilize MeHI as the Regional Extension Center (REC) which will become an entity that providers/consumers can rely on to find information about EHR implementation and optimization, user guidelines and the EHR Incentive Payment Program. The key to the Medicaid EHR Incentive Payment Program's success is to engage, educate and recruit Eligible Professionals by building awareness, creating transparency and providing appropriate support. EOHHS and MTC/MeHI are collaborating in a number of areas and EOHHS is in the process of amending its current agreement with MTC/MeHI to include work orders for MTC/MeHI to provide services to support ongoing Provider education and outreach of the Medicaid EHR Incentive Payment Program as well as services in support of the administration and operation of the Medicaid EHR Incentive Payment Program.

A.4.2 Broadband Access

Broadband electronic communications technology across Massachusetts is similar to that in all states, with greater access in more urban areas than in small and rural parts of the state. While any individual provider can implement an EHR system internal to the organization, the ability to participate in an exchange network is limited or impossible if broadband access is unavailable or unreliable. In many locations 24-hour by 365 days availability of broadband service is considered a must to effectively serve the needs of providers and members who will contribute to and use EHRs. In the most recent "New Economy Index" issued by the Information Technology and Innovation Foundation (ITIF) it is noted that Massachusetts ranked 4th in the nation in broadband access.

Based on both EHR survey data collected in October 2010, and in follow-up interviews with Provider organizations conducted in November/December 2010, overall, Massachusetts healthcare providers do not have significant issues with access to high-speed telecommunications as it relates to their adoption of EHR technologies. However, there is a strong correlation between population density and broadband availability, where underserved areas include the western (and more rural) areas of the State and the islands of Nantucket and Martha's Vineyard, which have large seasonal populations and are further removed from the metropolitan Boston population center.

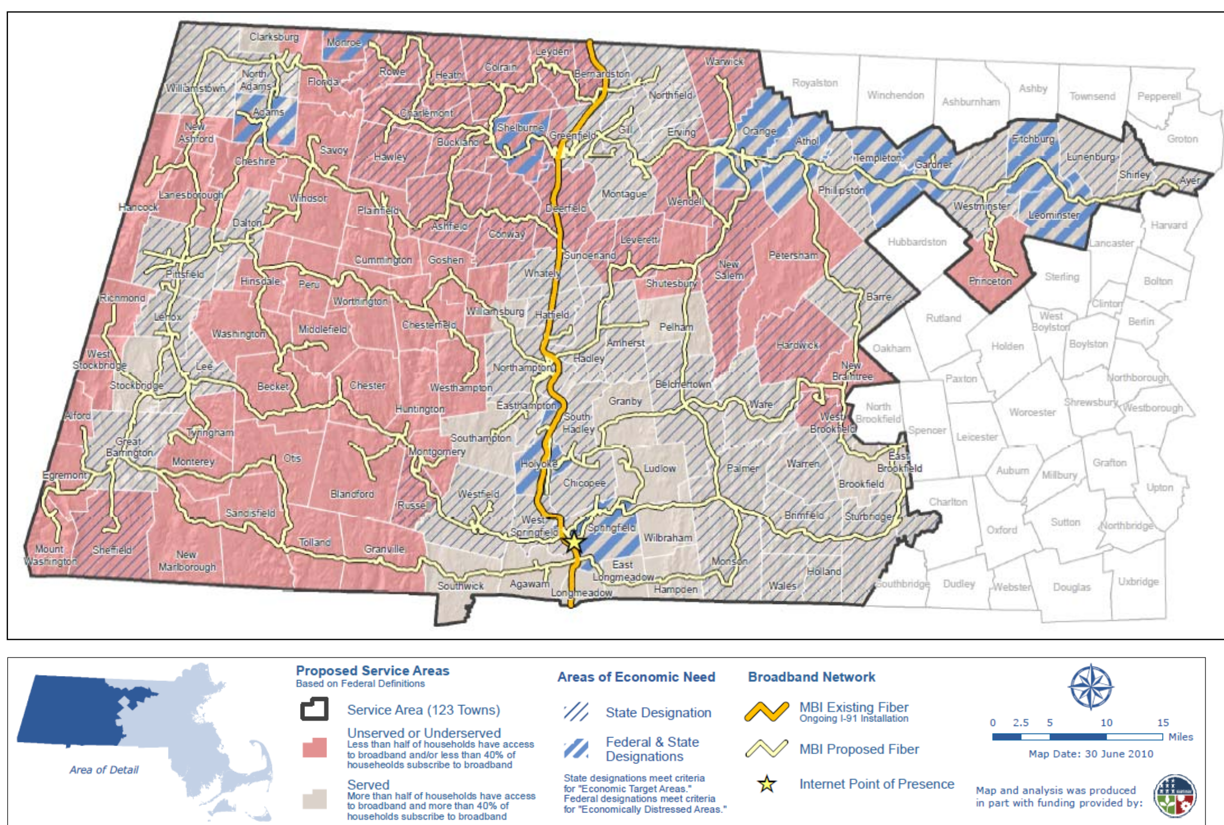


Diagram A.4.2.1: Map of Underserved Service Areas[15]

The primary quasi-public entity focused on the expansion of affordable broadband access in Massachusetts is the Massachusetts Broadband Institute (MBI) which is a division of MTC, created by the Massachusetts Broadband Act, which was signed into law in August 2008. In 2010, MBI announced the current MassBroadband123 project, which was awarded over $45M in federal funding that is being supplemented with over $26M in State funding to build a 1,338 mile fiber-optic cable, open access, middle-mile network to Connect 123 communities in western and north central Massachusetts. It is expected that MassBroadband123 will:

- Connect close to 1,400 public safety entities, community colleges, libraries, medical facilities and town halls;
- Build and maintain a network that will serve 333,500 households and 44,000 businesses over a geographic area covering over one-third of Massachusetts with more than one million residents; and
- Create 2,900 jobs and enable businesses to cultivate and retain an educated workforce.

[15] June 2010, www.massbroadband.org

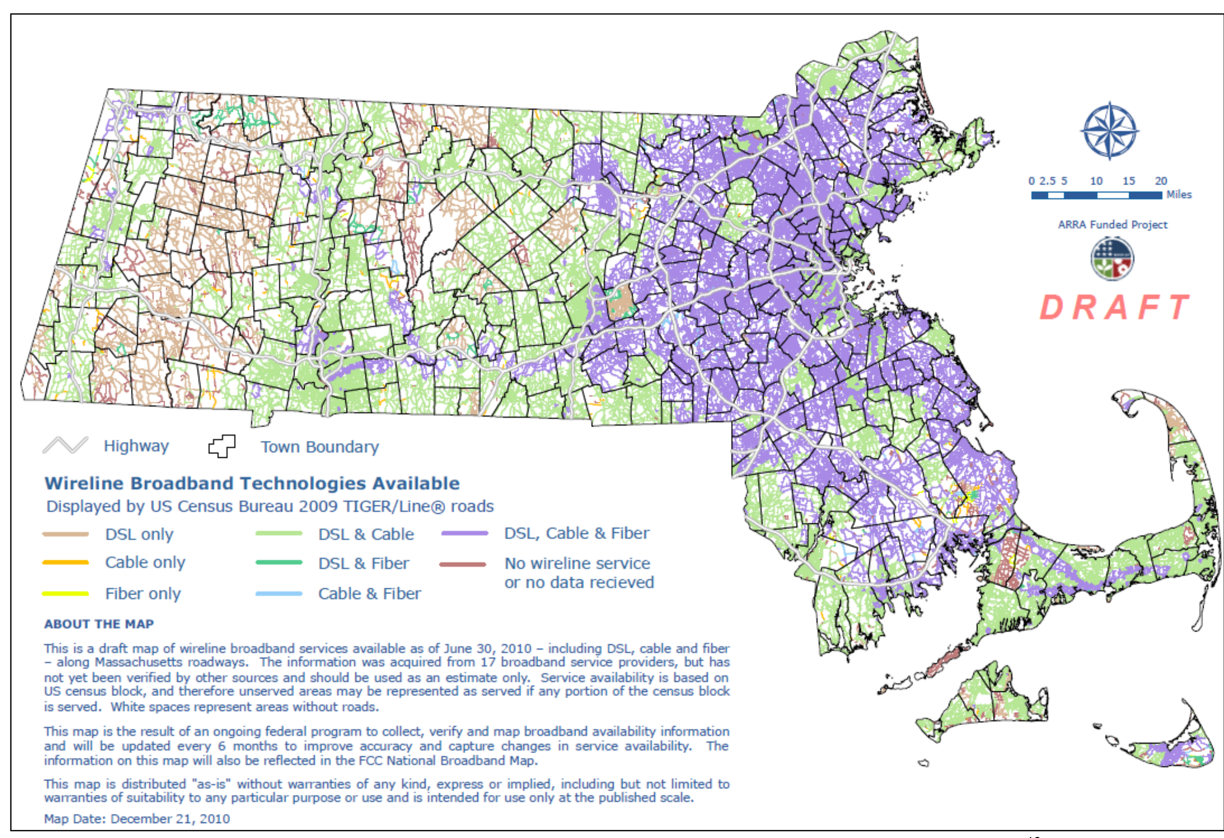


Diagram A.4.2.2: Map of Wireline Broadband Technologies available in MA[16]

In order to make this a reality, over 30,000 utility poles will need to be made “make-ready” for the installation of aerial fiber-optic cable. Furthermore, the National Broadband Plan (federal government) recommends as a national broadband availability target that every household in America have access to affordable broadband service offering actual download (i.e., to the customer) speeds of at least 4 Mbps and actual upload (i.e., from the customer) speeds of at least 1 Mbps. This national goal will likely meet the needs of almost all EHR vendors with regards to their bandwidth needs. For example, the following table was provided by a MeHI approved EHR vendor and is a general example of the bandwidth needs for varying numbers of end-users:

Sample Vendor Bandwidth Requirements		
Number of Current Users	**Recommended Download Speed**	**Recommended Upload Speed**
1-10 Users	768 kbps	512 kbps
11-20 Users	768 kbps Fractional T1 to T1	768 kbps Fractional T1 to T1
21-60 Users	Full T1 (or equiv.)	Full T1 (or equiv.)

Table A.4.2: Sample Vendor Bandwidth Requirements

[16] December 2010, www.massbroadband.org

A.4.3 State Law or Regulation that Impacts EHR Incentives

The law that most directly impacts EHR Incentives in Massachusetts is Chapter 305, which among other provisions, mandates that all providers have interoperable electronic health records in place no later than January 1, 2015. There are, however, other laws that directly and indirectly impact EHR incentives such as Executive Order 504. This order establishes new requirements designed to adopt and implement the maximum feasible measures reasonably needed to ensure the security, confidentiality and integrity of personal information and personal data, that is maintained by state agencies. Similarly, regulation 201 CMR 17:00 was issued and is intended to regulate for the protection of personal information of Massachusetts residents through the use of Written Information Security Plans (WISPs) with a March 1, 2010, deadline for full compliance.

Additionally, Executive Order 510 mandates IT consolidation in all Executive departments with the aim to do the following: align Secretariats' IT resources with their business strategies and priorities; standardize IT resources and create efficiencies; and ensure that the Commonwealth's digital assets are secure. The following IT services will be consolidated at the Secretariat-level under the stewardship of the Secretariat CIO (SCIO): helpdesk services; desktop and local area network services; website information architecture; and application services (as specified by the SCIO).

The state is also embarking on several initiatives to address the healthcare disparities among racial and ethnic groups and between the poor and non-poor, including the transformation of all primary care practices to patient-centered medical homes by 2015, reduction of preventable hospital admissions and readmissions, improvement of care transitions and movement of the payment system away from a predominant fee-for-service system to one of global payments. In addition, the Health Care Quality Cost Council (HCQCC), also created under Chapter 305 of the Acts of 2008, adopted a goal for the state to decrease annual rising healthcare costs.

A.5 HIT/HIE Engaged Stakeholders

This sub-section describes the stakeholders of HIT activities and discusses relationships with HIT coordinator and relationships with outside entities.

MeHI and the HIT Council are building upon Massachusetts' long history of initiatives in the quality improvement and HIT arenas. One of the foundational pioneering efforts for Health IT was the creation of the Massachusetts Health Data Consortium (MHDC) in 1978, as a non-profit coalition of a wide range of public and private stakeholders that sought to address health information needs and improve healthcare in the Commonwealth. In its early years, it embarked on data sharing initiatives, released hospital surgical use and variation studies and created an online inpatient database.

It also announced efforts to create a virtual network for moving, storing and sharing patient information. Between 2006 and 2009, MHDC served as the convening and coordinating entity for the Federal government's Health Information Security and Privacy Collaboration (HISPC) project. Participation from well over 100 contributors across the entire stakeholder continuum made this State's HISPC project a success. The table below identifies, in addition to EOHHS and MassHealth, key state agencies and other organizations involved in HIT activities throughout the state:

HIT/HIE Stakeholders	
Stakeholder	**Role**
The Massachusetts League of Community Health Centers (MLCHC).	Established in 1972 to represent and serve the need of the State's community health centers. In addition, the MLCHC currently provides technical assistance for Health IT adoption to its members and communities.
The Massachusetts Health Quality Partners (MHQP).	Established in 1995 by a group of Massachusetts healthcare leaders who identified the importance of valid, comparable measures to drive improvement. MHQP is a broad-based coalition of physicians, hospitals, health plans, purchasers, consumers, academics and government agencies working together to promote improvement in the quality of healthcare services in Massachusetts.
The New England Healthcare Exchange Network (NEHEN).	Established in 1998, NEHEN promotes the interoperability of health information technology, electronic health records and clinical and administrative health information exchange across organizational boundaries in the New England healthcare community. NEHEN's core technology allows direct communication between exchange partners without transaction fees. It's a standards-based, peer-to-peer health information exchange platform that allows the integration of information systems, regardless of whether they're custom-built or a commercial product.
Massachusetts Simplifying Healthcare Among Regional Entities (MA-SHARE).	Established in 2003 as a collaborative Massachusetts entity to promote a healthcare data exchange, using information technology, standards and administrative simplification. MA-SHARE developed clinical exchange and ePrescribing capabilities for its member organizations.

HIT/HIE Stakeholders	
Stakeholder	**Role**
Massachusetts eHealth Collaborative (MAeHC).	Established in 2004 as an initiative of the physician community to bring together the state's major healthcare stakeholders for the purpose of conducting a pilot program around health IT, by establishing an EHR and HIE system to enhance the quality, efficiency and safety of care in Massachusetts. To date, MAeHC has engaged physician practices and hospitals in the EHR adoption and HIE process in three Commonwealth communities: Newburyport, Brocton and North Adams. Physicians in these communities now submit quality data via HL7 2.x messaging and web services transport into a quality warehouse operated by MAeHC and hosted at the Massachusetts Medical Society.
Massachusetts' Commonwealth Connector Authority (The Connector).	Established in 2006 in response to Massachusetts' Healthcare Reform law, Chapter 58 of the Acts of 2006, The Connector administers the Commonwealth Care premium assistance program. Commonwealth Care makes health insurance products affordable by subsidizing the premiums for low income individuals not eligible for MassHealth.
Massachusetts eHealth Institute (MeHI).	Established in 2008, a division of the Massachusetts Technology Collaborative, MeHI is responsible for coordinating EHR initiatives and Health Information Exchange technologies in the Commonwealth. MeHI is the State agency to receive HITECH funding under the Commonwealth of Massachusetts 2010 Health Information Technology Strategic Plan Information Exchange Cooperative Agreement Program and serves as the single Regional Extension Center for the entire Commonwealth.
Massachusetts Technology Collaborative (MTC).	An independent development agency chartered by the State to promote new economic opportunity and foster a more favorable environment for the formation, retention and expansion of technology-related enterprise in Massachusetts. MTC is the legal entity that will contract with the IOOs that will provide services to support implementation of the state Health IT Strategic Plan; certify IOOs to work with providers to adopt certified EHR systems and connect with the statewide HIE; contract with providers to supply program management support to promote EHR dissemination; and provide staff support to the HIT Council.
NEHEN, Inc.	In July 2010, NEHEN merged with MA-SHARE to form NEHEN, Inc. Working together as a team, NEHEN and MA-SHARE coordinates the interoperability of electronic health records, health information technology and health information exchange across organizational boundaries in the New England healthcare community.

Table A.5: HIT/HIE Stakeholders

A.5.1 Relationships with the State HIT Coordinator

MassHealth and MeHI, the state's designated entity, closely collaborate on all EOHHS and state-wide HIT and HITECH initiatives. MeHI's Director was appointed the HIT Coordinator for Massachusetts in 2009. The HIT governance structure contained within Chapter 305 supports this close collaboration of EOHHS, MassHealth and the HIT Coordinator due to the fact that the Secretary of EOHHS chairs the HIT Council which oversees MeHI and the Medicaid Director being one of nine members of that Council. In addition, the HIT Coordinator as well as key MeHI staff are members of and attend the bi-weekly EOHHS/MassHealth HIT Steering Committee meetings.

MassHealth will continue to play a key coordination role with MeHI to ensure the promotion of EHR adoption and the Statewide HIE. By collaborating with MeHI and other entities in both the public and private sectors, MassHealth will play an important role as both a payer and collaborator to assist Massachusetts in achieving the desired impact on patient safety and quality of the healthcare system.

One manifestation of the collaboration between MassHealth, EOHHS and MeHI is an agreement between EOHHS/MassHealth and MTC. This agreement was signed in May 2010 and focused mainly on development of a preliminary marketing/communications plan and strategy for statewide HIT/HIE initiatives and Medicaid EHR Incentive Payment Program activities that will encourage the adoption and meaningful use of EHR technology by Massachusetts providers.

Under this first agreement, MTC produced the following deliverables for the marketing plan:

1. **Communication Strategy.** Preliminary communication strategy listing methods of communication, staffing requirements, budget and timeline and the development of initial examples of communication materials: provider newsletter, consumer/MassHealth member newsletter; MeHI web page; notification of informational sessions; and other materials related to notifying providers and consumers about the Medicaid EHR Incentive Payment Program and other HITECH initiatives.
2. **Marketing Strategy.** Initial marketing strategy identifying marketing goals and how they will be achieved; timeline and budget for rolling out marketing materials to providers and consumers; and development of an RFP for healthcare marketing firm.
3. **EHR/Health IT Provider Resource Eligibility Wizard.** Specifications and technical requirements for an EHR/Health IT Provider Resource Eligibility Wizard: a web-based guide for Massachusetts providers to determine if they are eligible for an EHR Incentive Payment Program, Loan Program or other program/support service associated with HITECH initiatives.
4. **EHR Survey.** Draft of EHR Survey with timeline, survey instrument and promotional plan; preliminary test of EHR Survey, with 10-15 providers; preliminary analysis of EHR Survey results by provider type, provider specialty, geographic location and provider affiliation. After the survey was approved, the survey was deployed and survey results analyzed and summarized for inclusion in the SMHP.

MassHealth and MTC are currently working an agreement to hire three dedicated MeHI/EVOT staff to support Medicaid incentive program planning and provider outreach and communication activities. These resources will support MassHealth on provider outreach and communication activities that relate to the incentive program, as well as support MassHealth in further

refinement of the incentive payment program operational planning efforts. In addition, MeHI and MassHealth are currently collaborating to ensure their objectives are in alignment, for example:

- State Health IT Strategic Plan and Chapter 305 objectives are tightly aligned with CMS Medicaid Health IT incentives;
- Medicaid Health IT funding is put forth towards achieving the adoption and meaningful use goals of Chapter 305 and the HITECH;
- Advance the adoption and meaningful use of Health IT, which is critical for the support of the statewide, all payer PCMH initiative; and
- Align MeHI's focus of IOO support for Primary Care Providers, Nurse Practitioners and Community Health Centers with the Commonwealth's commitment to supporting and enhancing primary care, as MeHI IOO certification will be instrumental in encouraging rapid adoption of Health IT by MassHealth providers.

A.5.2 Relationships with Outside Entities

Effective communication between providers, MassHealth and other entities regarding the Commonwealth's Health IT goals is recognized as a critical element in the statewide HIT Strategic Plan and SMHP. Close collaboration with MeHI is an important element of the communication strategy, as the Commonwealth works to assist eligible Medicaid providers in achieving meaningful use and qualifying for HITECH incentive payments. This collaboration will leverage available funding through the regional extension center and will allow the REC and MassHealth to present a uniform message to all entities participating in the promotion of meaningful use of EHRs and supporting technologies. The State-wide initiatives enacted by the Legislature will require open dialogue between MassHealth and multiple outside entities, including those providers who are not eligible to receive incentive payments under the HITECH Act.

Convincing providers of the benefits of adopting and using EHRs and pointing out how EHRs can reduce costs and improve health outcomes will be vital to the success of EHR adoption across the State. MassHealth will continue to work closely with provider associations across the State. As they have in the past, these associations can provide valuable insight to the benefits and challenges their members may experience as new guidelines and incentive programs are adopted to improve health and reduce the cost of healthcare across the State. These entities also play a critical role in identifying and satisfying the training needs of their members. Training and continued dialogue between the EOHHS and outside entities including professional organizations, managed care organizations, provider groups and individual providers will speed the effective adoption and use of EHRs.

Effective and close collaboration with existing Federal partners including the Office of the National Coordinator and CMS will also be critical to ensure the State is prepared to comply with existing regulations and respond to new Federal guidelines and regulations that impact the ongoing security and effective use of EHRs. Additionally, the Commonwealth's 2010 HIE Strategic and Operational Plan contains a representative list of major health networks in Massachusetts. Each network is expected to benefit from the on-going development of improved communications and collaboration between EOHHS and the interested partners.

A.6 Environmental Scan

This sub-section describes the current provider environment of EHR adoption. Interviews were conducted with stakeholders, meetings are schedule for the consumer advocates group and a provider survey was issued by MeHI in September 2010.

MassHealth believes that Provider and Stakeholder outreach is a core component of a successful SMHP and Medicaid EHR Incentive Payment Program planning effort. To this end, MassHealth conducted initial outreach to the State's major provider and hospital associations in November 2010. Additional meetings with the groups participating in the SMHP development process such as the Massachusetts Broadband Institute were held, to better understand unique challenges to date and future challenges that each of these groups represent. Each Provider Association was given the same set of questions that ranged from the association's communication methods and education to providers' understanding of the Medicaid EHR Incentive Payment Program and perceived barriers of EHR adoption.

A survey was also conducted by MTC/MeHI in concert with a third-party, SocialSphere of Cambridge. This survey targeted physician and dental provider populations to gather information that describes the current state of HIT adoption and use of EHRs in provider offices and hospitals across the state.

A.6.1 Stakeholder/Provider Interviews for SMHP

The Commonwealth met with nine separate provider associations with the purpose of educating, gathering current data and listening to concerns from the provider community. The table below identifies entities involved in HIT activities throughout the state, including those who participated in the SMHP provider follow-up sessions and the dates that meetings were conducted:

Entities Involved in HIT Activities		
Entity	**Role**	**Date**
Indian Health Services	IHS administrators and providers must understand the implications of EHR adoption on the unique needs of the peoples they serve. The benefits and implications of adopting EHR standards must be balanced with the costs of implementing new technology and training to support IHS providers and those they serve.	11/22/10
Massachusetts Broadband Institute	Governor Deval Patrick created the Massachusetts Broadband Institute when he signed the Broadband Act on August 4, 2008. Chapter 231 of the Acts of 2008 established MBI as a new division within the Massachusetts Technology Collaborative. The legislation provides up to $40 million bonding authorization to close broadband gaps.	11/23/10
The Veterans Health Administration	The Greater Boston Quality Coalition (GBQC) infrastructure uses the same National Health Information Network (NHIN) standards the VHA intends to use for its interoperability projects, allowing for future linkages when VA NHIN projects are developed throughout the country.	11/24/10
Dental Society Providers	The Massachusetts Dental Society will play a key role in disseminating information about the progress of EHR adoption, lessons learned and the specific impact of the EHR initiatives and Meaningful Use guidelines on its members. Educating providers relative to the specific benefits of EHR adoption to their practices is an important role for the Dental Society and for all provider associations to consider and support.	12/1/10

Entities Involved in HIT Activities		
Entity	**Role**	**Date**
Massachusetts League of Community Health Centers (MLCHC)	The Massachusetts League of Community Health Centers has taken a strong role in assisting health centers as they work to upgrade their health information technology systems and capacity for using data. To date, 44 of Massachusetts' 52 health centers have either purchased, implemented or are in the process of implementing their electronic practice management systems (EPM) and electronic medical records (EMR). In 2009, the League released CHIA DRVS™, a web-based central data repository and reporting solution for seven pilot health centers. The system extracts data from three EMR and four EPM systems nightly and has the capability for producing more than 20 quality reports and measuring 20 health center-specific key performance indicators. Health centers are able to benchmark and compare their data at a range of levels: within health centers, health center to health center and provider to provider.	12/2/10
Massachusetts Hospital Association (MHA)	As the primary representative of the hospital community in Massachusetts, MHA plays a central role in influencing the public policy environment. MHA offers its members a range of data services and resources, from software to databases, addressing the cost, quality and use of healthcare services to support managerial and clinical decision-making.	12/8/10
Massachusetts Association of Behavioral Health Systems (ABH)	The leading advocacy organization for providers in Massachusetts' mental health and substance abuse arena. Fighting for high-quality, community-based care for families and individuals with mental illness, addiction and substance-use disorders, ABH provides leadership and statewide coordination on important public policy, financing, preferred clinical models and quality assurance issues. The E-Health Committee provides guidance, peer support and resources to ABH members as they undertake the selection and implementation of electronic health record systems.	12/6/10
Massachusetts Medical Society (Pediatricians and Non-Pediatricians)	The Massachusetts Medical Society is the statewide professional association for physicians and medical students. Medical Society members are dedicated to educating and advocating for the patients and physicians of Massachusetts. The Medical Society is expected to provide training and lessons learned information relative to EHR adoption and EHR technology to its members.	12/2/10
Massachusetts Coalition of Nurse Practitioners (MCNP)	The Massachusetts Coalition of Nurse Practitioners (MCNP) was organized in 1992 to provide focused representation and support of issues relevant to all Massachusetts Nurse Practitioners regardless of specialty or organizational affiliation. The MCNP is expected to provide training and lessons learned information relative to EHR adoption and EHR technology to its members.	12/9/10
Consumer Advocates	The MassHealth Advocates Group meets on a monthly basis and includes representatives from the Greater Boston Legal Services, Boston Public Health Commission, Mayor's Help Line, Healthcare for All, MIRA Coalition, Massachusetts Law Reform Institute, Boston Healthcare for the Homeless, Community Partners and Disability Law Center.	Scheduled for January 2011

Table A.6.1: Entities Involved in HIT Activities

The feedback from the provider association meetings often resembled the results seen in the provider survey described in Section A.6.2 below. Highlights of provider identification of barriers to EHR adoption that were heard during Provider Association meetings include:

- Financial barriers are seen as the largest barrier to EHR adoption;
- Providers are unsure how the Medicaid Patient Threshold numbers are to be calculated;
- There is worry about the “gap,” that is the loss of productivity during EHR implementations;
- Providers are unsure of the definition of Meaningful Use;
- Providers feel as if they do not have the right vendor selection tools and/or knowledge; and
- Providers are unsure what they should do to become certified if they already have adopted (or built) an EHR system.

A.6.2 Provider Survey

Between May through September 2010, MassHealth and MTC/MeHI collaborated on the development of a Provider EHR Survey to gather information about the current state of EHR adoption in provider offices across the State as well as understand providers’ perceptions and concerns about the Medicaid incentive payment program. The provider survey was disseminated to approximately 20,000 doctors and 1,500 dentists by email by the Massachusetts Board of Registration in Medicine and the Massachusetts Board of Registration in Dentistry. Between September 15, 2010 and October 8, 2010, 2,654 physicians, dentists and/or their staff responded to 31 survey questions on issues related to adoption of EHR systems in Massachusetts.

- Of the 2,654 respondents, 270 did not believe they qualified because they did not treat patients enrolled in Medicaid and/or Medicaid managed plans;
- Of this 2,384 an additional 690 respondents were excluded from the final results because they believed they provide 90% or more of their services in an in-patient or emergency services setting; and
- Of the remaining 1,694 respondents only 1,585 completed the survey of which 1,493 were physicians and 92 were dentists.

The Massachusetts NewMMIS database contains approximately 21,500 providers, of which there are 20,000 doctors and 1,500 dentists. Given this pool a statistically valid sample size was achieved and would be between N=300 and N=400 completed surveys. (Where N = the number of completed surveys/respondents)

- The margin of error for N=300 would be +/-5.62%;
- The margin of error for N=500 would be +/-4.34%;
- The margin of error for N=1,000 would be +/-3.03%;
- The margin of error for N=2,000 would be +/-2.10%

Summary Findings and Recommendations:

- **Increase awareness and education**. Before this survey, approximately half (48%) of doctors reported they were either “not at all” or “not very” familiar with the Medicaid EHR Incentive Payment Program. Similarly, 83% of dentists report they were either “not at all” or “not very” familiar with the Medicaid EHR Incentive Payment Program. Most providers had not seen the CMS definitions of “Eligible Professionals”;
- **Develop Focused Communications.** MassHealth should send communications to Provider Associations (Professional Organizations) for dissemination to providers. The survey reported that both physicians and dentists overwhelmingly preferred outreaches to be conducted by professional organizations. Additionally, stakeholders suggest using a mix of mediums to ensure a successful outreach program. Providers also noted that targeted communication is highly desirable;
- **Continue to Clarify Terms.** Of those providers that responded and said they currently “do not have” or are “not currently adopting” an EHR system, 18% of doctors and 28% of dentists reported they, “do not understand the incentive program.” This was echoed at provider meetings. Providers often mentioned they did not understand the definition of “meaningful use” and were confused about how to calculate their Medicaid threshold volumes; and
- **Market available resources and assistance services**. Many of Massachusetts’ smaller agencies and clinics have expressed interest in the Medicaid EHR Provider Incentive Program but have stated they will require assistance and support to adopt and implement EHR technologies.

Key Findings:

A provider-based survey was conducted by MTC/MeHI and MassHealth in the fall of 2010. The survey focused on the physician and dental provider population to gather information on the current state of HIT adoption and use of EHRs in provider offices across the state as well as obtain information on what the providers believe are barriers to EHR adoption and incentive payment program participation. Results obtained through the Provider EHR survey were discussed during follow-up interviews with provider organizations conducted in November and December 2010 as part of the SMHP planning process.

Key findings of the Provider EHR survey include:

- Levels of EHR adoption were different in the western and eastern geographic regions of the State;
- The survey results indicate that urban practices are more automated than smaller, rural practices. That is, the further away from Boston Central (Suffolk County) a provider is, the less likely they are to have the resources available to adopt an EHR system; western MA trails behind Suffolk County by 37% in terms of EHR adoption;
- 90% of Suffolk County (i.e., Boston) providers responded they are, “Currently using EHR technology”;
- A significant majority, more than three-in-four physicians, currently use computers to look up patient information. Dentists, however, are far less likely to use this technology;
- 86% of survey respondents reported they already have or are in the process of adopting EHR and 10% have plans to adopt the technology in the next few years;

- Physicians and dentists who currently use EHR systems are satisfied overall with their systems;
- Among dentists, 42% have no plans to adopt an EHR technology at this time;
- The most significant roadblocks to EHR adoption are financially driven. The number one response was that EHR adoption is “too expensive.” The second was that providers were, “not convinced of the return on investment”;
- The most significant roadblock to the incentive program is lack of awareness. Dentists reported that before this survey 67% were “not at all” familiar with the Medicaid EHR Incentive Payment Program. 24% of doctors also reported they were not at all familiar with the program;

Key findings of the provider association meetings include:

- Providers reported that they lack confidence in EHRs to deliver a favorable return on their investment;
- Providers reported that they lack a general awareness of the Medicaid EHR Incentive Payment Program;
- Providers reported that they desire greater clarity on the availability of MassHealth to support the financial needs of its providers that are now mandated through Chapter 305 in order to have EHR in place by 2015; and
- Some Providers reported they prefer to receive information about the EHR Incentive Payment Program from associations in addition to other communication channels.

Future Survey Improvements:

MassHealth and MeHI intend to survey providers on an annual basis to understand the status of certified EHR adoption and meaningful use by providers across the state. Some ways that the present survey could be improved include the following:

- Clarify the questions to ensure that there is an understanding of the level of provider that is responding to the questions—individual level vs. group or practice level.
- Although Nurse Practitioners reported that the survey results largely represented their concerns, they were not included in the survey since it was issued under BORID and BORIM.
- MeHI and MassHealth would like to develop and deploy an EHR Provider Survey for those providers that are currently not eligible for the incentive payment program such as behavioral health providers and long-term care providers.

Question 14, that asks, “Please indicate which, if any, of the following elements are present on your current computer system,” which could have been worded more precisely to identify what elements (EHR Modules) were simply installed or purchased by a physician, but rather EHR Module usage.

The questions asked during the 2010 Provider Survey (developed by MeHI) can be found in Appendix C (Provider Survey Questions) and the current environment analysis of the MTC/MeHI survey results can be found in Appendix D (Provider Survey Results).

Other Relevant Survey Data:

During December 2010, the American Hospital Association conducted a separate survey that was communicated to the Massachusetts Hospital Association (MHA). This information was shared with MassHealth during the provider outreach meetings. MHA has preliminarily reported that approximately half of the Massachusetts acute care hospitals they outreached to responded to their inquiry. Of the acute care hospitals that responded 36 responded as follows when asked the question:

Question: “When do you plan to apply for meaningful use?”

- 21 or 58% of the respondents report they will apply for meaningful use in 2011;
- 12 or 33% of the respondents report they will apply for meaningful use in 2012;
- 1 or 3% of the respondents report they will apply for meaningful use in 2013;
- 1 or 3% of the respondents report they do not know when they will apply for meaningful use; and
- 1 or 3% of the respondents did not respond to this question.

Section B: The State's "To-Be" Landscape

This section of the SMHP provides a high-level overview of the existing Commonwealth HIT Strategic Plan and the HIE Operational and Strategic Plan, how they are intended to support the SMHP and the governance model that will support the Medicaid EHR Incentive Payment Program. This section also articulates MassHealth's future HIT vision, and identifies goals and objectives that must be met to fulfill the agency's HIT vision.

Introduction:

This section of the SMHP serves to lay the foundation for the State Medicaid Agency (MassHealth) Health Information Technology (HIT) work that will be accomplished over the next five years. This work is integral to the management of the MassHealth enterprise and is intertwined with the work of partners both within and outside of State Government. The projects described throughout this document are not intended to stand alone but instead should be viewed as pieces of a comprehensive whole, a single unified approach to achieving better health outcomes for the entire population of Massachusetts.

"Harnessing health information technologies leads to better, more coordinated care for patients," said Secretary of Health and Human Services Dr. JudyAnn Bigby. "As the national leader on health care reform, Massachusetts is poised to use the investment of federal funding through the HITECH Act to build on our accomplishments by using technology to promote coordinated patient care and control costs."

- JudyAnn Bigby, M.D. Secretary of EOHHS

MassHealth firmly believes that it must play a central role in driving improvements in care coordination, the proliferation of electronic health records, the upgrading of EOHHS infrastructure, and the development of the state level capabilities necessary to allow for the robust exchange of health care information. This section provides the vision of the future. The following pages will:

- Highlight the thoughtful and collaborative process that Massachusetts undertook in developing the ONC approved Commonwealth of Massachusetts 2010 HIT Strategic Plan (HIT Plan) and describe how the MassHealth vision for the future fits and aligns with it;
- Provide the statewide Commonwealth of Massachusetts 2010 HIT Strategic Plan vision, goals and objectives as the context within which the SMHP was developed;
- Describe the process used by EOHHS and MassHealth in developing the SMHP vision, goals and objectives including, the information gathered from research activities of other states SMHP development and the approach taken to assure stakeholder engagement;
- Introduce MassHealth's vision, goals and objectives;
- Outline the broad strategies to be implemented over the next five years to achieve the vision, goals and objectives including identifying an MMIS and IT architecture related strategy, a governance development strategy, an EHR provider adoption strategy, and a legislative/regulatory related strategy; and
- Provide examples of planned initiatives and projects that tangibly demonstrate the planned actions of the MassHealth to achieve the strategies and vision, goals and objectives.

The Commonwealth of Massachusetts has a history of striving to be a national leader in the area of HIT and in EHR proliferation in particular. Massachusetts has been working for several years to move the Commonwealth strategically towards a health care system that is capable of delivering important clinical information at the point of care delivery in order to improve health outcomes for the population. In 2008, Massachusetts enacted Chapter 305 which mandates that all providers demonstrate competency in the use of interoperable EHRs no later than January 1, 2015. This law is congruent with federal law and regulations. The SMHP, for Massachusetts, is simply one piece of the larger statewide health information technology planning and implementation effort.

The SMHP Executive Team adopted the following four high-level goals for the SMHP effort:

- **Goal 1:** Improve access to comprehensive, coordinated, person-focused health care through widespread provider adoption and meaningful use of certified EHRs.
- **Goal 2:** Demonstrably improve the quality and safety of health care across all providers, through Health IT that enables better coordinated care, provides useful evidence-based decision support applications, and can report data elements to support quality measurement.
- **Goal 3:** Slow the growth of health care spending through efficiencies realized through the use of Health IT.
- **Goal 4:** Improve the health of the Commonwealth's population through public health programs, research and quality improvement efforts enabled through efficient, accurate, reliable and secure health information exchange processes.

The SMHP Executive Team decided to adopt the goals previously established in the Commonwealth of Massachusetts 2010 HIT Strategic Plan rather than developing a different set of goals for the SMHP. The Executive Team focused their efforts on establishing a revised list of corresponding objectives for each high-level goal. The Executive Team was informed in their efforts by stakeholder opinions on the priority for objectives and by other state research into smart practices used and learned from the development of SMHP's in other jurisdictions.

MassHealth views the resulting SMHP goals and objectives as wholly-aligned with the statewide HIT Plan goals and objectives. Further, the Governance structure within Massachusetts for HIT assures that the vision, goals, and objectives of the SMHP and the statewide HIT Plan are closely aligned. Key individuals from MassHealth and EOHHS on the Commonwealth's HIT Council will serve to oversee statewide HIT planning efforts.

In Section E (The State's HIT Roadmap) of this report the direct linkage between strategies and projects across the Commonwealth is demonstrated. This is not an accident but instead an intended consequence of state law, the Governance structure, and long-term collaboration among state level entities involved in planning and implementation. Massachusetts intends to build on these strengths throughout this plan.

Work Performed:

The SMHP Executive Team, chaired by the MassHealth Director, was convened to create the SMHP vision, goals, and objectives. This group included the individuals representing different functional areas of MassHealth, and also included representatives of the Department of Public Health. Functional areas represented included:

- Acute and Ambulatory Care;
- Behavioral Health Care;
- Budget and Finance;
- Information Technology Division;
- Long-term Care;
- Office of Clinical Affairs;
- Operations; and
- Patient Centered Medical Home Project.

The SMHP project lead and staff supporting the development of the SMHP organized information gathering meetings both internal to EOHHS and MassHealth and with key external partners. After the initial information gathering meetings, the SMHP Executive Team met for the first of two vision, goal and objective setting meetings. After the preliminary meeting, the SMHP project lead and staff supporting the development of the SMHP organized stakeholder outreach meetings to obtain feedback on the Objectives in order to inform the SMHP Executive Team of stakeholder priorities. In addition to the stakeholder outreach, the SMHP project lead and the staff supporting the development of the SMHP conducted interviews with 10 states to inform the vision, goal and objective setting processes (please see Section B.4 Other State Research, for a complete description of the process utilized and the information obtained).

At the first SMHP Executive Team meeting it was determined that the starting point for discussion should be the goals and objectives contained within the Commonwealth of Massachusetts 2010 HIT Strategic Plan as these goals and objectives had been collaboratively developed and provided the umbrella under which the SMHP development should rationally occur. The SMHP Executive Team agreed during the first meeting, that stakeholder feedback should be obtained on the existing statewide HIT Plan goals and objectives since the SMHP's goals and objectives would be drawn in large part out of the existing statewide HIT Plan.

At the same time that the stakeholder outreach was occurring, the SMHP Executive Team completed a ranking exercise in order to identify, from the statewide HIT Plan goals and objectives, those objectives of highest importance to MassHealth and EOHHS in the development of the SMHP. The SMHP Executive Team was clear that all the objectives within the statewide HIT Plan are important and that the exercise they undertook was to provide focus for the development of the SMHP and not to diminish the importance of the State's level HIT goals and objectives. After all, MassHealth and EOHHS participated in the creation of the state level goals and objectives and supports them all as important in moving the state forward over the next five years.

The second SMHP Executive Team meeting began with a summary of the other state research and an overview of the stakeholder outreach process. The process of establishing the SMHP goals and objectives continued with a detailed review of the ranking exercise and a discussion of the results. The SMHP Executive Team ultimately adopted the four goals and many objectives from the HIT Plan, as well as developing three new objectives for the final SMHP.

Organization of this Section:

Section B (The State's "To-Be" Landscape) of the SMHP contains four major sections:

Sub-Section	Contents
B.1 Existing HIT/HIE Plans and Governance	This sub-section of the SMHP is intended to describe the strategic planning documents that have been created and adopted by MassHealth for HIT and HIE, describe their appropriate interaction with the SMHP, and to provide an understanding of the current Governance structure that will support the Medicaid EHR Incentive Payment Program.
B.2 SMHP Vision	This sub-section of the Plan is intended to articulate the one and five-year vision for the State having adopted the Medicaid EHR Incentive Payment Program. This section discusses the impact on patient care, coordination of care, quality reporting, and identifies the goals and objectives for the SMHP.
B.3 Stakeholder Engagement Process	This sub-section of the Plan is intended to describe how MassHealth involved external stakeholders in the SMHP planning process and summarize the major outcomes of their participation in the process.
B.4 Other State Research	This sub-section of the Plan is intended to describe how MassHealth involved Research from other States in the SMHP planning process and summarize the major outcomes of their participation in the process.

Table B.1: Sub-Sections of Section B (The State's "To-Be" Landscape)

Overview of Executive Office of Health and Human Services (EOHHS) and MassHealth:

EOHHS is the state agency responsible for administering a number of human services programs to the financially and medically needy. A key responsibility of EOHHS is serving as the single state agency responsible for administering the Medicaid program and the State Children's Health Insurance Program within Massachusetts (collectively, MassHealth), pursuant to M.G.L. c.118E, Title XIX of the Social Security Act (42 U.S.C. § 1396 et seq.), Title XXI of the Social Security Act (42 U.S.C. § 1397aa et seq.), and other applicable laws and waivers.

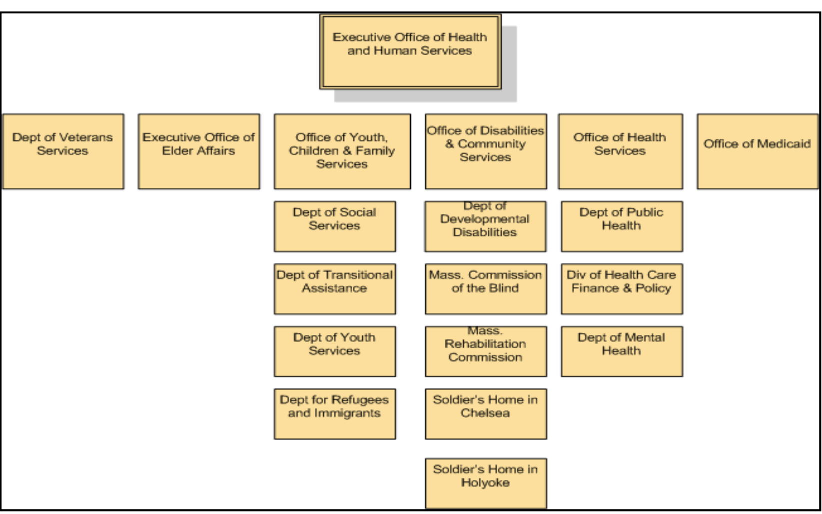


Diagram B.1: High-Level Organizational Structure of EOHHS

EOHHS administers MassHealth under a MassHealth Research and Demonstration Waiver that expands coverage to families at up to 300% of the Federal Poverty Level and provides community supports to elders and persons with disabilities through a number of Home and Community-Based Service Waivers. As of September 2010, MassHealth provided comprehensive health coverage to nearly 1.4 million eligible low-income children, families, people with disabilities and seniors throughout the Commonwealth.

Nearly 800,000 of the 1.4 million members are enrolled in MassHealth Managed Care Programs. These programs consist of five Managed Care Organizations (MCOs), with a total enrollment of 481,000 Members, and the Primary Care Clinician Plan (PCC Plan), with a total enrollment of 319,000 members. EOHHS contracts with a Behavioral Health Managed Care Vendor to provide behavioral health services to PCC Plan members, and some fee-for-service members. In addition, MassHealth administers Senior Care Options (SCO), a fully capitated Medicare and MassHealth managed care program available to both dually-eligible and MassHealth-only seniors (age 65 and over) serves as a voluntary comprehensive health plan that covers all the services that are reimbursable under Medicare and MassHealth. MassHealth also administers the fully capitated Medicare and MassHealth managed program called Program of All Inclusive Care for the Elderly (PACE) program available to frail individuals age 55 and over who meet nursing facility clinical criteria and who, at the time of admission, are able to remain in the community with supports.

B.1 Existing Commonwealth HIT/HIE Plans and Governance

This sub-section of the Plan is intended to describe the strategic planning documents that have been created and adopted by Massachusetts for HIT and HIE, describe their appropriate interaction with the SMHP, and to provide an understanding of the current Governance structure that will support the Medicaid EHR Incentive Payment Program.

During 2010, the Commonwealth of Massachusetts adopted both the HIT Strategic Plan and the HIE Strategic and Operational Plan. Both plans have been approved by ONC. These planning documents, respectively, lay out the overall statewide strategy and approach to HIT and HIE in Massachusetts. EOHHS and MassHealth participated in the development process for these two important planning documents. These documents articulate a clear and coordinated vision and display goals and objectives that mirror the priorities of EOHHS and MassHealth.

The plans also lay out the history of HIT in Massachusetts and establish six strategies for achieving the overall goals and objectives they articulate. The strategies, objectives, goals, and overall HIT vision are all pieces of a combined whole that has been collaboratively determined over the past several years. These plans currently provide a clear and accurate depiction of HIT today and the vision for the future. Having been active participants in the creation of these plans, both MassHealth and EOHHS understand and agree with the vision and objectives described within these documents.

B.1.1 MassHealth and MeHI Collaboration

Massachusetts Chapter 305, enacted in 2008, mandates that all providers have interoperable EHRs in place no later than January 1, 2015.

The Commonwealth established an organizational structure for statewide HIT planning that enables EOHHS and MassHealth leadership and staff to fully participate in all aspects of statewide HIT planning and development. The Commonwealth passed Chapter 305 in 2008 creating both the Massachusetts Health Information Technology (HIT) Council and Massachusetts eHealth Institute (MeHI). The law made the Secretary of EOHHS the Chair of the Council and designated that one of the nine Council members be an executive of MassHealth. The HIT Council is the advisory board of MeHI, a division of the Massachusetts Technology Collaborative. MeHI is charged with promoting cost containment, transparency and efficiency in the delivery of quality health care through the deployment of EHR systems in all health care provider settings and to network those systems through the statewide interoperable HIE. As a result of this unique organizational structure, MassHealth, EOHHS, and MeHI staff members have established HIT workgroups to ensure that all efforts related to HIT planning and implementation both within MassHealth and statewide are fully integrated in their approaches and desired outcomes.

An example of an outcome of the collaboration among MeHI, MassHealth and EOHHS is the agreement among the entities to ensure that the various sources of external funds are targeted in a manner that avoids duplication of incentives among certain provider groups, prioritizes, and targets technical assistance and provider education to those Medicaid providers who serve the highest-need populations. The organizations have further agreed that a “gap analysis” will be undertaken to determine which MassHealth providers may be under-represented in both the Medicare and MassHealth Provider Incentive Payments Programs. For those MassHealth providers that may “fall through the cracks of both incentive programs” (e.g. Public Health

Hospitals, behavioral health providers, long-term care providers, etc.) MeHI and MassHealth will convene a work group that will develop specific initiatives to support these MassHealth providers to acquire or upgrade certified EHRs as well as to support the providers in their meaningful use of the EHR systems. In addition, based on discussions from the workgroup, MeHI has determined that its business model for the Regional Extension Centers will focus on MassHealth providers with the criteria being individual and MassHealth group practices (10 providers or less); Public Hospitals and Critical Access Hospitals; Community Health Centers and Rural Health Clinics; and other settings that predominantly serve uninsured, underinsured and medically underserved populations.

B.1.1.1 Service Agreement

One early manifestation of the collaboration between MassHealth and MeHI was a services agreement between EOHHS and MTC. The initial agreement focused primarily on development of a preliminary marketing/communications plan and strategy for statewide HIT/HIE initiatives and Medicaid EHR Incentive Payment Program that will encourage the adoption and meaningful use of EHR technology by Massachusetts providers. The marketing plan included strategies and a budget for the development of a common look for HIT/HIE and Medicaid EHR Incentive Payment Program communication materials (possibly co-branded with EOHHS) so that providers and eventually consumers recognize that these materials are coming from a trusted source of information; incorporated any specific EOHHS or Commonwealth requirements for marketing materials into the strategic plan; outlined strategy for marketing to providers and eventually consumers; developed time line and proposed the budget for rolling out marketing materials to providers and eventually consumers. Under this first agreement, MTC produced the following deliverables:

1. **Communication strategy.** Preliminary communication strategy listing methods of communication, staffing requirements, budget and timeline, and the development of initial examples of communication materials: provider newsletter, consumer/MassHealth member newsletter; MeHI web page; notification of informational sessions; and other materials related to notifying providers and consumers about the MassHealth EHR Incentive Payment Program/HITECH initiatives;
2. **Marketing strategy.** Initial marketing strategy identifying marketing goals and how the goals and objectives will be achieved; timeline and budget for rolling out marketing materials to providers and consumers; and development of an RFP for healthcare marketing firm;
3. **EHR/Health IT Provider Resource Eligibility Wizard.** Specifications and technical requirements for an EHR/Health IT Provider Resource Eligibility Wizard: a web-based guide for Massachusetts providers to determine if they are eligible for an EHR Incentive Payment Program, Loan Program or other program/support service associated with HITECH initiatives; and
4. **EHR Survey.** Development and ongoing support of a provider-based EHR Survey with timeline, survey instrument and promotional plan. Additionally this work included a preliminary test of EHR Survey with 10-15 providers and analysis of EHR Survey results by provider type, provider specialty, geographic location and provider affiliation. After the survey was approved, the survey was deployed and survey results analyzed and summarized for inclusion in the SMHP.

The Commonwealth of Massachusetts 2010 HIE Strategic and Operational Plan documents the following approach with regards to likely future service agreement activities:

> "Subsequent phases of work are currently being discussed, taking into consideration data sharing; planning and system design; Medicaid Incentive Payment Program operational and administrative support for MassHealth providers; and IOO[17] support for MassHealth primary care providers. This collaboration will leverage available funding through the regional extension center (MeHI) and allow the REC and MassHealth to present one voice and a uniform message to all audiences."

B.1.1.2 Joint planning activities between MassHealth and MeHI

MassHealth is proposing that MeHI will play an important role in the planning, implementation, and operation of the Medicaid EHR Incentive Payment Program through the creation of the MeHI Enrollment, Validation, and Outreach Team (MeHI/EVOT). MassHealth will oversee the MeHI/EVOT through the institution of monitoring and oversight methods including the development and review of service level agreements (SLAs) with MeHI, on-site monitoring of MeHI/EVOT, review and approval of Medicaid EHR Incentive Program policies and procedures to ensure compliance with federal regulations, review of monthly and ad-hoc operations reports, a random sampling of incentive program documentation to ensure policies and procedures are being followed, and reviewing the output of a contracted annual Independent Review of MEHI program administration. Section E (The State's HIT Roadmap, Diagram E.1.2) identifies the major business functions that will be required of EOHHS and MeHI/EVOT in order to support the Medicaid EHR Incentive Payment Program.

Other joint planning activities include the following:

- Joint development of common marketing and communication strategy for consistent messaging and "co-branding" of EHR information for Massachusetts providers;
- Joint development and deployment of an annual MassHealth Provider EHR Survey with shared results;
- MeHI staff is supporting the development of MassHealth's plan to implement and administer the MassHealth Incentive Payment Program;
- MassHealth and EOHHS staff are supporting the MeHI's Adhoc Workgroups for Health Information Exchange; Privacy and Security; and Regional Extension Center; and
- Planning activities related to MassHealth's proposal to have MeHI/EVOT staff support key administrative functions of the Medicaid EHR Incentive Payment Program[18].

B.1.2 HIT Council

The HIT Council[19] consists of nine members, including four representatives of governmental agencies and five representatives from the private sector. The four agencies with seats on the HIT Council are the Executive Office of Health and Human Services, the Executive Office for Administration and Finance, the Health Care Quality and Cost Council and the Office of Medicaid (MassHealth). The five private sector members are appointed by the Governor. Of the five, one is to be an expert in health information technology, one an expert in law and health policy and one an expert in health information privacy and security. The HIT Council is chaired by the Secretary of EOHHS, who also chairs the Health Care Quality and Cost Council and

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[17] Implementation Optimization Organization (IOO)
[18] Pending CMS approval
[19] The Commonwealth of Massachusetts 2010 Health Information Technology Strategic Plan, accessed on the Web on December 11, 2010 at http://www.maehi.org/pdfs/MeHI_2010_HIT_Plan.pdf, page 24.

oversees MassHealth. The HIT governance structure ensures that various agencies of the Commonwealth and private sector organizations are coordinated.

Four key responsibilities of the HIT Council are:

- Along with MTC, as described above, provide approval of the statewide HIT Plan and budgets associated with its implementation;
- Provide approval of the substance and form of contracts between MTC and Implementing Organizations;
- Along with MTC, as described above, provide approval of the use of funds within the eHealth Institute Fund ("the Fund") for certain purposes; and
- Implementation of the statewide HIT Strategic Plan.

These responsibilities, vested in the HIT Council, put into practice a structure that allows the goals and objectives of the MassHealth to be represented in the implementation of REC and HIE initiatives.

B.1.3 MeHI Strategic Planning

The Commonwealth of Massachusetts 2010 HIE Strategic and Operational Plan was approved by ONC in the fall of 2010. A collaborative planning process was utilized that involved the complete integration and cooperation of the HIE, the REC, and the MassHealth. As such, the vision, goals and objectives represent substantial agreement among the parties, including MassHealth, on the priorities for the next five years. Subsequent sections of this report will explain the MassHealth's approach to the development of the SMHP goals and objectives. It is important to understand they were developed within the context of the Commonwealth of Massachusetts 2010 HIT Strategic Plan and the Commonwealth of Massachusetts 2010 HIE Strategic and Operational Plan.

The following section provides a high-level articulation of the vision by year for the HIE and overall HIT in the Commonwealth as described in the statewide HIT Strategic Plan:

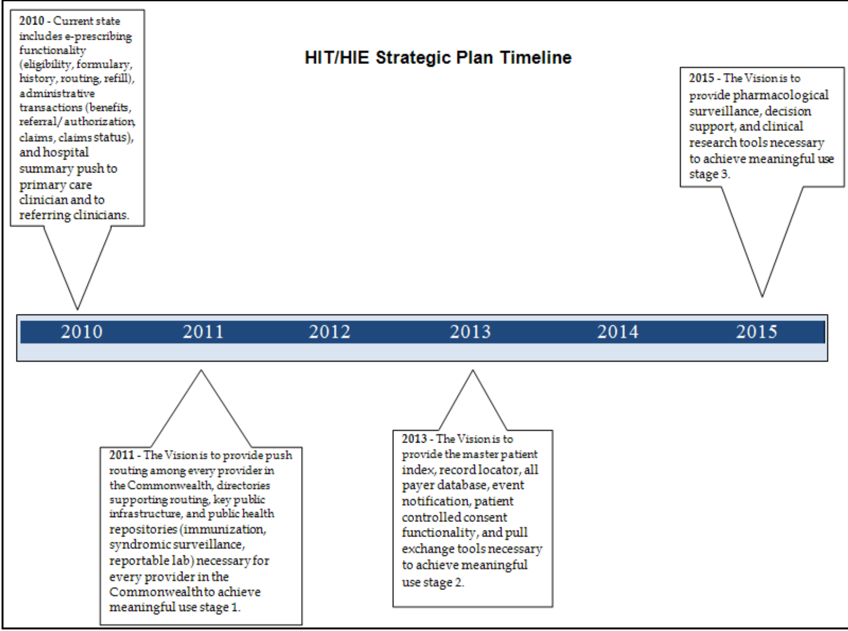


Diagram B.1.3: HIT/HIE Strategic Plan Timeline

B.1.4 HIT Strategic Plan Vision, Goals and Objectives

The Commonwealth of Massachusetts HIT Strategic Plan established a vision for the future. The vision is described as follows:

> "As a result of healthcare reform and statewide deployment and adoption of Health Information Technology (Health IT), the Commonwealth of Massachusetts will benefit from, and be recognized for, a significantly healthier population, with measurable improvements demonstrated in health care costs, quality, safety and efficiency. Every resident in the state will have access to the highest quality care and to providers, who are supported in their efforts to deliver safe, equitable, affordable, coordinated care. Widespread implementation and adoption of Health IT will give health care providers access to electronic medical records that are interoperable and to health information exchanges that allow them to share key information about their patients in a secure manner. This will also reduce medical errors and provide a platform for enhanced coordination of care.
>
> Armed with information from multiple sources, patients will be in better control of their own health and health related services. They will have access to their protected health information through a secure web-based interface, and with the patient's permission, providers will be able to access real-time health information from all providers involved in their care. Health IT will support an integrated system and promote improvements in health care quality and safety. To manage and maintain this system, a Health IT workforce that is skilled and knowledgeable in advancing all aspects of Health IT adoption and sophistication will be available to providers and employers.
>
> Achieving this vision will require a shift in the way all participants in the health care system interact with each other. A Health IT enabled system will support virtual care provider/patient interaction, wherever a patient might be, with information coming from disparate sources, such as home monitoring devices, registries, other clinicians and providers, and research trials. Health IT supported administrative transactions will decrease administrative burdens for the providers, patients and payers. Finally, information will be easily, securely and reliably available to better understand public health needs and trends, to support public health interventions and programs, and be available to support research and emergency response efforts.
>
> It is understood that payment reforms, greater accountability for the costs and quality of healthcare, privacy protection and more efficient technologies will also be necessary to achieve this vision. The intent of this strategic plan is to lay the Health IT foundation for these changes to occur."

The Commonwealth of Massachusetts HIT Strategic Plan also identified four high-level goals and 18 supporting objectives[20]. During the SMHP visioning work with the MassHealth Executive Team, it was determined that the four statewide goals should be adopted and the 18 supporting objectives be enhanced to provide additional focus on the priorities set forth by EOHHS and MassHealth. The MassHealth Executive Team provided direction to ensure that the goals and objectives for the SMHP be consistent and aligned with those previously developed in the statewide HIT Plan. The four goals as set forth in The Commonwealth of Massachusetts HIT Plan include:

[20] IBID, pages 6-8

- **Goal 1:** Improve access to comprehensive, coordinated, person-focused health care through widespread provider adoption and meaningful use of certified EHRs.
- **Goal 2:** Demonstrably improve the quality and safety of health care across all providers, through Health IT that enables better coordinated care, provides useful evidence-based decision support applications, and can report data elements to support quality measurement.
- **Goal 3:** Slow the growth of health care spending through efficiencies realized through the use of Health IT.
- **Goal 4:** Improve the health of the Commonwealth's population through public health programs, research and quality improvement efforts, enabled through efficient, accurate, reliable and secure health information exchange processes.

The preceding goals served as a starting point for the MassHealth discussion of the SMHP goals and objectives as delineated in the next section.

B.2 SMHP Vision

This sub-section of the Plan articulates the SMHP vision, goals and objectives. This section discusses the impact on patient care, coordination of care, quality reporting, and identifies priorities for the next twelve months for MassHealth.

The driving vision for the SMHP is not only completely aligned with, but fits wholly, within the vision of the statewide HIT Plan. As such the HIT vision as presented above in section B.1.4 is congruent with the more concise vision statement for the MassHealth SMHP:

> "The MassHealth vision is for a health care delivery system that produces the highest quality health care outcomes in the nation while containing costs."
>
> "MassHealth envisions a more effective and efficient health care delivery system supported by fully interoperable health information supplied in a coordinated manner, at the point of care and in real-time."
>
> "The MassHealth vision assures the privacy and security of everyone's health care information."

B.2.1 Vision in Action

In 2015, the Commonwealth of Massachusetts will have a fully interoperable HIE system that allows patients to receive the care they need at the right place and at the right time. MassHealth and EOHHS will participate in the health care system as both consumers and providers of information. MassHealth and EOHHS will accumulate information such as immunization data and make it available in a secure real time fashion across the HIE at the point of care delivery.

This vision of the future aligns completely with the federally enacted Affordable Care Act (ACA). Included below is a graphical depiction of the components/domains under the ACA. Following this depiction is a listing of MassHealth projects that put the vision into action. The graphic on the following page depicts the major technical, administrative and clinical infrastructure components essential to effectively implement the provisions of the ACA. These components include:

1. Required Health Insurance Exchange (HIX; Massachusetts already has the Connector authority as its HIX);
2. Eligibility systems that interact efficiently and comprehensively with the HIX;
3. HIEs that provide the pipeline for the movement of clinical information in real time;
4. Improvements in service approaches, client coordination, and reimbursement strategies;
5. Enhanced quality reporting.

Taken together, these components provide the opportunity for states to transform their health care systems by implementing comprehensive and complementary new or enhanced systems, clinical and administrative processes, and quality reporting metrics. MassHealth recognizes that the current national and state political environments offer a once in a generation opportunity to transform the Massachusetts healthcare system by strategically investing in Health Information Technology. As the diagram below illustrates, the SMHP and EHR adoption initiatives not only work to achieve the specific HIT and HIE vision and goals put forth in the SMHP, but support meeting ACA requirements and opportunities. Massachusetts, as a national leader in HIT and clinical quality improvement, stands in the vanguard of states poised to implement integrated

administrative and clinical systems architecture as envisioned within the ACA. This opportunity is reflected throughout the MassHealth SMHP.

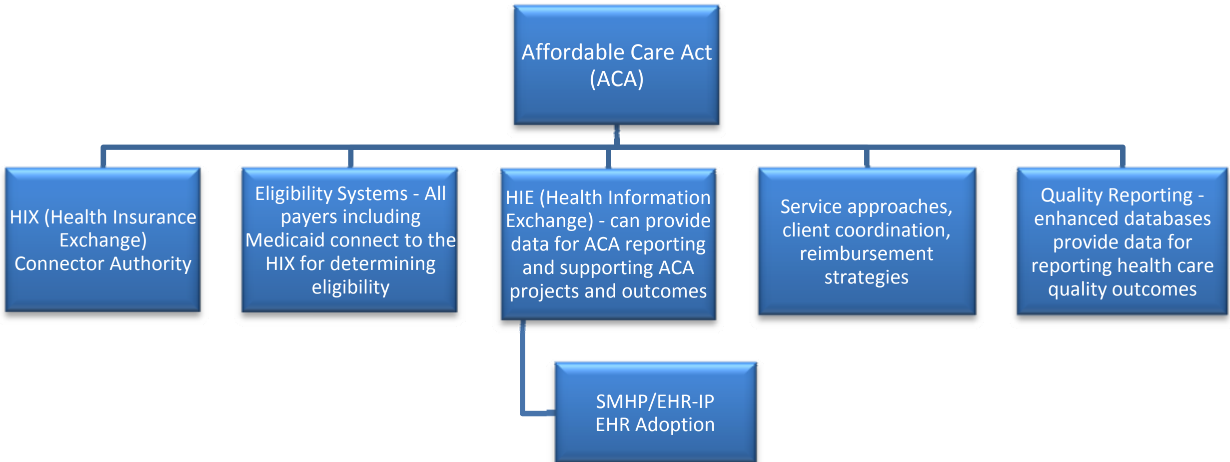


Diagram B.2.1.4.5: Relationship between ACA and HIT Projects

As depicted above, the SMHP and the Medicaid EHR Incentive Payment Program, are two important components in the Commonwealth's HIE Plan. Success within the ACA context requires not just proliferation of electronic health records, but the success of many other HIT, clinical, and administrative process improvements, too. Massachusetts recognizes the critical importance of moving forward not just one component but the entire suite of ACA components. The MassHealth SMHP reflects this vision of coordinated implementation of many different initiatives which, as a whole, are intended to ultimately improve health outcomes for the entire population.

The MassHealth Agency's Information Technology Team in collaboration with MeHI identified fourteen EOHHS SMHP HIT Projects for funding and full implementation in support of the "To-Be" vision. Detailed project descriptions as well as a discussion of the strategies to be utilized to move from the "As-Is" to the "To-Be" environment can be found in Section E (The State's HIT Roadmap) of this report. The projects are listed below:

#	EOHHS HIT Project	Project Description
1	All Payer Claims Database	Mass Health and Medicaid providers will derive particular value by ensuring that claims and clinical records are in sync and accurate. The extended clinical data can also be used to provide datamart level information to Quality Data Center vendors and directly to physicians in order to satisfy the Meaningful Use quality measure regime.
2	Claims Relay Service Analysis and Design Project	A claims relay service will provide a single gateway for the submission of EDI claims for MassHealth claims processing. The service would include the translation of the EDI into the appropriate, platform specific formats. The service will also transmit the claim to the appropriate claims engine. MassHealth currently manages 4 separate platforms to process claims. The Relay Service would insure that the right claims engine receives and processes the right claim.
3	Connection to Quality Data	Medicaid providers will benefit from access to Quality Data

#	EOHHS HIT Project	Project Description
	Center	Center services that are facilitated by the HIE and via relationships with QDC vendors that are brokered by the HIE.
4	Direct Project Gateway Interface (formerly NHIN Direct)	The Direct Project offers a less complex point-to-point method for transmitting clinical summary documents. This Direct Project is a stop-gap push transaction option for providers and provider organizations that have a longer horizon to implement machine-to-machine push and, eventually, pull clinical information.
5	Enterprise Record Locator Service (ERLS)	The ERLS will enable bi-directional clinical data transfer for Medicaid providers. ERLS will facilitate patient management of their own health information. The ERLS will facilitate and make more efficient the correlation of clinical and claims data.
6	Formulary/Medication Management	Ensure a common, up-to-date service for Medicaid providers to utilize for formulary and medication management.
7	MA Virtual Gateway	The Virtual Gateway (VG) is the front-door for many of the state's health-related services, for example verifying Medicaid status and provisioning new Medicaid patients. The Virtual Gateway provides a secure access point for providers and patients to perform administrative tasks.
8	Medicaid EHR Incentive Payment Program	This project provides federally-funded financial incentives to Eligible Professionals and hospitals to adopt, implement, and upgrade and demonstrate meaningful use of certified EHRs. The project includes outreach and communications to providers to promote EHR adoption. The project will also include an annual provider survey to collect required data for CMS reporting.
9	Provider Directory Interface	Medicaid providers will utilize the provider directory to fulfill their meaningful use obligations, in particular as the exchange obligations are anticipated to increase when Stage 2 Meaningful Use requirements are set forth including "pull" transactions.
1 0	Public Health Information Service Provider (P-HISP)	The Public - Health Information Service Provider (P-HISP) capability will consist of one or multiple contract(s) with vendor(s) to provide Health Information Exchange (HIE) services at a subsidized cost to providers that meet certain economic and technical qualifications.
11	Public Health - Health Level Seven (HL7) Interfaces	The HL7 Gateway is an EOHHS enterprise gateway used to exchange the HL7 messages between Healthcare Providers and EOHHS applications. The gateway uses secure web service for data exchange and it is integrated with EOHHS centralized Access and Identity Management Service (AIMS) for authentication and authorization, and with IBM Websphere Transformation Extender (WTX) for HL7 message transformation. It was originally developed for Massachusetts Immunization Information System (MIIS) to support the providers to demonstrate the "meaningful use" criteria. As part of SMHP, the HL7 Gateway shall be expanded and integrated with the following Public Health systems that require HL7 interface in order to improve the public health response and support the "meaningful use" criteria. • Electronic Laboratory Reporting System (ELR) • Massachusetts Immunizations Information System (MIIS) to support additional HL7 message types (Query By

#	EOHHS HIT Project	Project Description
		Parameter and Query By Example) • Syndromic Surveillance System (SSS) • Prescription Monitoring Program (PMP) • Bureau of Substance Abuse Service - Opioid Treatment Provider • Women's Health Network / Men's Health Partnership • School Based Health Centers • Childhood Lead Poisoning Prevention Program (CLPPP) • Children's Behavioral Health Initiative (CBHI) The HL7 Gateway shall be enhanced to add the following new features: • Support for bi-directional health information exchange between EHR and Public Health systems. • Receipt and Processing of HL7 batch messages in asynchronous mode. • Expand the capacity of WTX engine to support increase in volume of transactions.
12	Public Key Infrastructure (PKI)/Certificate Management	Public Key Infrastructure and Certificate Management services are vital to establishing a trusted connection between sending and receiving providers as well as provider to patient data exchange. The state will implement PKI and Certificate Management services as a fundamental aspect of the Statewide HIE set of centralized services.
13	Re-architecting and Enabling Payment Methodologies	This project entails a thorough review of the Technical Architecture of the Managed Care system and the development of a plan to remediate the processes overall. The end result will be a greatly improved platform that will support evolving Managed Care programs for the Commonwealth that will drive down costs and improve quality.
14	Statewide HIE Solution Integration Services	Solution Integration services are critical to any complex enterprise project and, in particular, to the Massachusetts HIE implementation. MA will be selecting the best vendors for each of the services or service sets that are required to provide Statewide HIE services. An overall solutions integration vendor rationalizes the services of one vendor with other vendors and provides a cohesive, single front-door to a complex set of services from multiple vendors. Medicaid providers and patients will benefit from having a single point-of-contact for implementation, training and problem resolution.

Table B.2.1: EOHHS SMHP HIT Project Summary

The planning for these projects aligns with the overall HIT and HIE project timeline. The details of which are displayed in Section E (The State's HIT Roadmap) of this document. The following four examples articulate a clear vision of the "To-Be" state for HIT within MassHealth, EOHHS, and the Commonwealth of Massachusetts. The examples represent a sample of initiatives that will help achieve the vision, but do not represent a comprehensive list of all MassHealth project work plans. These examples represent approaches to care delivery that depend on infrastructure and capability improvements across the entire HIT spectrum in order to deliver on the promise of improved health care outcomes.

B.2.1.1 Patient Centered Medical Home

EOHHS is currently establishing a Patient Centered Medical Home (PCMH) delivery model of care across both state-financed and private-sector healthcare. The PCMH model is designed to promote comprehensive, coordinated, patient-centered care delivered by teams of primary care providers, including physicians and nurses. Currently, EOHHS has received funding from the Commonwealth Fund to support the transformation of 14 Community Health Centers into patient-centered medical homes over a four-year period. In addition, a PCMH demonstration project involving a group of about 50 primary care practices (PCPs) serving both MassHealth and commercially enrolled patients. Finally, EOHHS is implementing a PCMH project as part of the CHIPRA Quality Demonstration Grant that was awarded, in partnership with four other grant partners: Children's Hospital Boston, the Massachusetts Health Quality Partners, the National Initiative for Children's Healthcare Quality, and the University of Massachusetts Medical School. The ultimate goal of EOHHS is to expand the PCMH delivery model to all providers statewide over the next few years.

With this initiative in mind, the goal of MassHealth leadership is to optimize statewide HIE technology and infrastructure for the establishment of a so called "Virtual Patient Centered Medical Home" to support the sharing of health related information of MassHealth members across all providers, payers, and state agencies in a secure manner. EOHHS leadership envisions that the sharing of this health information will ultimately lead to significant improvements in the efficiency, quality and cost effectiveness of heath care services delivered to MassHealth members through the support and enhancement of activities such as care coordination, administrative simplification and quality reporting.

B.2.1.2 Care Coordination

Currently, utilization management, prior authorization, and other care management services are provided by EOHHS on behalf of members receiving care through the Primary Care Case (PCC) Plan or on a fee-for-service basis through contracts with the University of Massachusetts Medical School, MBHP, and Dental Services of Massachusetts wholly-owned subcontractor, Dental Quest, MassHealth's third-party dental program administrator. In addition, other EOHHS agencies provide case management services for many MassHealth members. Some of the EOHHS case management services include coordination with medical services, although the primary focus is on social support, residential programming and Long-Term Care Services.

Care coordination is one of the key aspects or principles of the PCMH delivery model. In this model, the personal care physician for each patient is responsible for leading a team of individuals within a practice site to provide high quality, comprehensive care and ensuring that care is coordinated across all providers within the overall health care system. EOHHS believes that through the use of HIT, HIE, electronic health registries and meaningful use of electronic health record systems, providers will be able to ascertain what services have been provided to their patients both within their own practice sites as well as outside their practices, and determine if those services are being delivered at the appropriate time and setting, as well as at the appropriate level of care for optimal health outcomes for the patient.

The leadership of EOHHS believes that enhanced care coordination and case management activities both within the agency as well as at the provider site or PCMH practice site can be achieved by leveraging the statewide HIE and through meaningful use of EHR systems in the following ways, provided that the MassHealth member has provided their consent for sharing their health information:

- Ability to access clinical information (laboratory results, prescription drug interactions, allergies, etc.), member preferences, special needs requirements and other relevant data for MassHealth members across MassHealth providers, managed care organizations, federal and private payers, and all other state agencies that render clinical services in order to provide highest quality, effective and efficient health care and community support services.
- Improved ability to identify and target MassHealth members who require intensive care coordination. Typically, these members are the highest risk/highest cost members of the population.
- Ability to develop and share individual patient care plans across providers and state agencies.
- Ability to identify through electronic disease registries which MassHealth members would benefit from disease management programs and health education services.
- Ability to perform effective and timely discharge planning from any health care setting including discharges and transfers from hospital to home; hospital to skilled nursing facility; skilled nursing facility to home. The discharge care plans would include support services and clinical information which would be shared with each of the providers to ensure that the patient does not experience adverse outcomes that would lead to situations like re-admissions back to an inpatient hospital due to falls, infections, drug reaction, etc.

B.2.1.3 Quality Reporting

MassHealth is responsible for PCC Plan quality management and oversight. The goal of this program is to help PCCs improve the rate at which certain preventive and chronic care services (for both medical and behavioral health services) are provided to PCC Plan members, and supports the PCC's ability to manage the care of its PCC Plan members. Through the performance management program, the PCC Plan provides PCCs with a PCC Profile Report of certain preventive and utilization measures (for larger PCCs), a Care Monitoring Registry identifying members with selected chronic conditions, Reminder Reports giving member-level information on preventive and utilization measures, training and informational sessions, educational materials and newsletters for PCCs and PCC Plan members. EOHHS also conducts additional quality management activities for the PCC Plan, such as the NCQA's Healthcare Effectiveness Data and Information Set (HEDIS) measurement and PCC Plan member satisfaction surveys to assess the effectiveness of the PCC Plan performance, making the results available to PCCs.

Quality reporting, performance measurement and improvement are also contained within MassHealth Managed Care Organizations that includes HEDIS and consumer satisfaction surveys to assess the effectiveness of Plan performance.

Quality reporting, performance measurement and improvement are also key principles within the PCMH model. NCQA's, Joint Principles of PCMH states that, "evidenced-based medicine and clinical decision support tools should guide decision-making" and "physicians in the practice accept accountability for continuous quality improvement through voluntary engagement in performance measurement and improvement." Through the use of HIT, HIE, electronic health registries and electronic health record systems, MassHealth and its providers, including PCMHs will be able to significantly improve the measurement and analysis of clinical quality performance in the following ways:

- Ability to make better use of clinical performance measures that presently exist for hospitals, nursing homes and physicians by accessing and reacting to information on a "real time" basis.
- Ability to use clinical data-like laboratory results and other clinical data that were previously unavailable to MassHealth staff, its providers, and contracted vendors for performance measurement and analysis.
- Ability to link clinical information like laboratory results and other sources of outcome data to claims data for risk adjustment purposes as well as for use in the evaluation of the cost effectiveness and quality of services provided to MassHealth members.
- Ability to access statewide disease registries.
- Ability to access statewide benchmarks for performance measures to allow for individual provider level comparisons, practice level comparisons and plan-wide comparisons against these benchmarks.
- Ability to enhance required public health reporting by automating the "pushing" of the data from providers including ancillary providers to Department of Public Health and other public health agencies and then "pulling" data back to the providers as required.

In addition to the above opportunities EOHHS is currently implementing a project to collect, report and test a set of pediatric quality measures that has been adopted by CMS, and will be available for voluntary reporting by Medicaid programs nationally as part of the CHIPRA Quality Demonstration Grant it was awarded, in partnership with four other grant partners: Children's Hospital Boston, the Massachusetts Health Quality Partners, the National Initiative for Children's' Healthcare Quality, and the University of Massachusetts Medical School. There is some small overlap between the core measures set and the set of Meaningful Use Clinical Quality Measures that currently exist. As the work of the CHIPRA grant proceeds, the CHIPRA grant project team and the MassHealth HIT Steering Committee will coordinate on activities designed to best align the data collection and reporting efforts under HIE and the collection and reporting of the core pediatric quality measures.

B.2.1.4 Administrative Simplification

EOHHS leadership believes that the use of the statewide HIE and electronic health record systems provides an opportunity for the agency to greatly simplify the administrative functions performed by the staff at MassHealth and other state agencies in the following ways:

- Through the implementation of a Enterprise Record Service Locator, MassHealth operational staff, analytic staff and providers will be able to track, report and coordinate services for members as they access services across multiple state agencies;
- The ability to share information related to state agency administrative processes such as enrollment, eligibility, income verification, employment history and renewals for MassHealth members that access services provided by multiple state agencies will reduce administrative costs by eliminating processes that may be duplicative and burdensome for providers, members, and MassHealth staff, while ensuring an appropriate level of service delivery;
- The synchronization and transmission of clinical guidelines or standards such as preferred drug lists or formularies across the Commonwealth will reduce the cost of managing these types of guidelines for the state as well as reduce the administrative burden and complexity for MassHealth providers;

- The ability to collect broad consent information using a single encounter including administrative authorizations, referrals and service extensions/approvals will reduce the cost of administering these types of activities as well as simplify the process for both MassHealth providers, agency staff and members; and
- The use of HIE and EHR systems will significantly improve the ability of MassHealth and EOHHS staff to analyze, model and evaluate both present and future costs, quality and effectiveness of health care services delivered to MassHealth members.

B.2.2 SMHP Goals and Objectives

As a result of conducting the visioning meetings, meeting with external stakeholders, and conducting research, MassHealth adopted the following goals and objectives for the SMHP:

Goal 1: Improve access to comprehensive, coordinated, person-focused health care through widespread provider adoption and meaningful use of certified EHRs.
Objectives: 1.1 Equitably increase the number of providers who can demonstrate meaningful use of interoperable EHRs across all service areas, including rural, suburban and urban areas where health disparities have been identified. 1.2 Assure private and secure electronic access, use and portability of protected health information by all authorized individuals. 1.3 Increase the number of patients whose care is coordinated across disparate delivery systems within the state and across state boundaries.

Table B.2.2: SMHP Goals and Objectives (Goal 1)

Goal 2: Demonstrably improve the quality and safety of health care across all providers, through Health IT that enables better coordinated care, provides useful evidence-based decision support applications, and can report data elements to support quality measurement.
Objectives: 2.1 Equitably increase the number of ambulatory primary care providers that have re-engineered their care processes, to better manage chronic conditions, through adoption of patient centered medical home processes and Health IT that supports evidence-based care. 2.2 Adopt and promulgate a common set of Health IT enabled quality and safety measures across all payers and providers. 2.3 Commit to the principles that hospitals and health care providers would report quality and safety measures one way, one time and to one place, to ensure they are collected consistently and with minimum administrative burden. ***2.4 Behavioral Health, Substance Abuse and Long-Term Care Providers are included in the HIE to improve overall quality of care.*** ***2.5 Transitions of care will be improved across the population.*** 2.6 Adopt meaningful use measures, as defined by the federal government, for reporting purposes across all agencies.

Table B.2.2: SMHP Goals and Objectives (Goal 2)

Goal 3: Slow the growth of health care spending through efficiencies realized through the use of Health IT.
Objectives: 3.1 All payers in the Commonwealth will adopt a single set of Federal standards for eligibility and claims payment processes, which will be incorporated into certified EHRs. 3.2 Patients report more timely, effective and appropriate care, both virtual and face to face. 3.3 Engage patients to actively participate in managing their health information, their health and their care, and encourage providers to engage with and respond to their patients.

Table B.2.2: SMHP Goals and Objectives (Goal 3)

Goal 4: Improve the health of the Commonwealth's population through public health programs, research and quality improvement efforts, enabled through efficient, accurate, reliable and secure health information exchange processes.
Objectives: ***4.1 Efficiently track and demonstrate improvement in the Commonwealth's key public health measures.*** ***4.2 Develop and improve EOHHS and public infrastructure and capabilities to allow for robust participation in the Statewide HIE.*** 4.3 Support health reform in the Commonwealth, by providing ready access to data and information that is necessary for identification and implementation of key reform policies and strategies, being meticulous about protecting patient information and carefully following the minimum necessary use of information standards.

Table B.2.2: SMHP Goals and Objectives (Goal 4)

As discussed above and clearly articulated within the Objectives themselves, MassHealth has carefully considered and maintained the connection to the State level HIT effort by adopting four goals outlined in the Commonwealth of Massachusetts Health Information Technology Plan, and also by incorporating the most relevant objectives from that same plan. MassHealth has modified one objective from the HIT Plan and added three additional objectives (*displayed above in bold, underlined italics*) which reflect areas of significant importance to the clients of the state's public health care programs, to their providers, and to the Medicaid program itself.

B.2.2.1 The Next 12 Months

Staff and senior leaders from EOHHS and MassHealth will be involved in the following activities with the goal of planning for implementation of the MassHealth Provider Incentive Payment Program for Meaningful Use of EHR Systems and preparing the State MassHealth Health Information Technology Plan (SMHP):

- Agency staff will continue to work closely with MeHI in the development of integrated and synergistic approaches to MassHealth and statewide HIT planning.
- Agency staff are currently in the process of developing an HIT Implementation Advanced Planning Document (HIT IAPD) for submission to CMS.
- Agency staff will continue to work with MeHI to assure the availability by the end of 2011 of push routing among every provider in the Commonwealth, directories supporting routing, identity management framework, and public health repositories (immunization, syndromic surveillance, reportable lab) necessary for every provider in the Commonwealth to achieve meaningful use stage 1.

B.2.2.2 IT Architecture

In 2009, MassHealth implemented a new Medicaid Management Information System, referred to within the office as NewMMIS. Although there exists many other information systems within EOHHS and MassHealth that may be considered legacy systems, the NewMMIS provides an updated foundation that is needed for the future. This foundation will help EOHHS and MassHealth more effectively establish IT architecture and related strategies to build and implement necessary health information technologies that support the goals and objectives for improved health care delivery in the Commonwealth.

For example, EOHHS plans to build an HL7 Gateway as the primary means for clinical data exchange between providers and EOHHS. This technology will replace manual, error-prone, and duplicative method of sharing client information with a mechanism for the electronic transfer of data from the provider's EMR system directly to EOHHS. Clinical data exchange via an HL7 Gateway will enable EOHHS to accept real time clinical information regarding clients to better monitor utilization of services and quality outcome measures. The HL7 Gateway will enable messages from provider systems to be transformed and parsed to EOHHS systems such as the Data Warehouse, Enterprise Invoice Management/Enterprise Service Management (EIM/ESM) and case management systems thus relieving providers of duplicative data entry into their own EMR and an EOHHS supplied system.

The HL7 Gateway can be built upon the technology of the Virtual Gateway (the EOHHS web portal) by utilizing existing technologies such as the Enterprise Service Bus (ESB). The ESB serves as the core message broker both internally between EOHHS applications and externally with outside applications through the use of an enterprise message model. The message model defines a standard set of messages that the ESB will both transmit and receive. When the ESB receives a message, it identifies the route to the receiving application and provides any message transformation that is needed. The ESB will continue to serve as the hub for electronic exchange of information with HL7 messages being sent to the HL7 Gateway and then parsed and routed to the appropriate application. The ESB, in combination with an EOHHS HL7 Gateway, will integrate directly with the statewide Health Information Exchange to allow for the appropriate flow of data from the HIE into EOHHS and will form the basis of an HIE "public utility" for all users in the Commonwealth.

The EOHHS IT Architecture direction is consistent with and supported by the Commonwealth's statewide IT architecture and strategy coordinated by the state's Information Technology Division (ITD). This enterprise strategy emphasizes shared infrastructure services, common technical and security standards, and interoperability among agency systems and data where permissible through the use of open standards and federation. The new and enhanced technologies EOHHS will develop as part of this plan will need to scale quickly to accommodate bi-directional data flows with virtually every provider in the Commonwealth. EOHHS will be able to take advantage of two robust enterprise data centers[21] with consolidated virtual environments to ensure necessary scalability, security, business continuity and disaster recovery. In addition, EOHHS will be able to leverage the following shared enterprise initiatives that are currently in the planning stages or at the beginning stages of implementation:

- **MassNet** – The goal of this initiative is to create a statewide broadband network that is fast, efficient, effective, and provides a foundation for shared resources in order to reap

[21] The Commonwealth has begun construction of a new state of the art Data Center in the western part of the state that will be operational in the fall of 2012. This will add to the data center capacity already in place at the Massachusetts Information Technology Center in the eastern part of the state.

deep discounts and cost savings, facilitate innovation, increase productivity, and provide maximum access to Government services to the citizens of the Commonwealth.

- **Shared Application Infrastructure** – The goal of this initiative is to develop shared infrastructure services that can be used by multiple agencies to support Service-Oriented Architecture (SOA) applications. Strategic objectives include achieving efficiencies through reuse; enabling appropriate data sharing across agencies; facilitating the implementation of modular system development; developing agile, flexible infrastructure and systems; and implementing effective cross-agency governance for shared infrastructure.

B.2.2.3 Medicaid Information Technology Architecture State Self-Assessment

The MassHealth "as is" component of the Medicaid Information Technology Architecture State Self Assessment (MITA-SSA) was completed in 2008. The "to be" component of the State Self Assessment for MassHealth was postponed until after the on-site MMIS certification by CMS in order to allow all of the business functionality and supporting technology incorporated in the new MMIS to be reflected in this new baseline. CMS previously agreed that the business practices and systems that support DPH, the Department of Developmental Services (DDS, formerly known as the Department of Mental Retardation), and the Department of Mental Health (DMH) are considered integral parts of the newMMIS. Therefore, a true MITA effort needs to encompass the “as is" and "to be" status of these three agencies, and therefore their relevant systems will be included in future MITA-SSA efforts.

B.2.2.4 Governance Model

Massachusetts strives to be a national leader in HIT and has mature Governance structures in place that are capable of managing the overall statewide HIT Plan implementation. The following diagram, taken from the Commonwealth of Massachusetts 2010 HIT Strategic Plan, displays the current Governance structure for overall HIT advancement in Massachusetts.

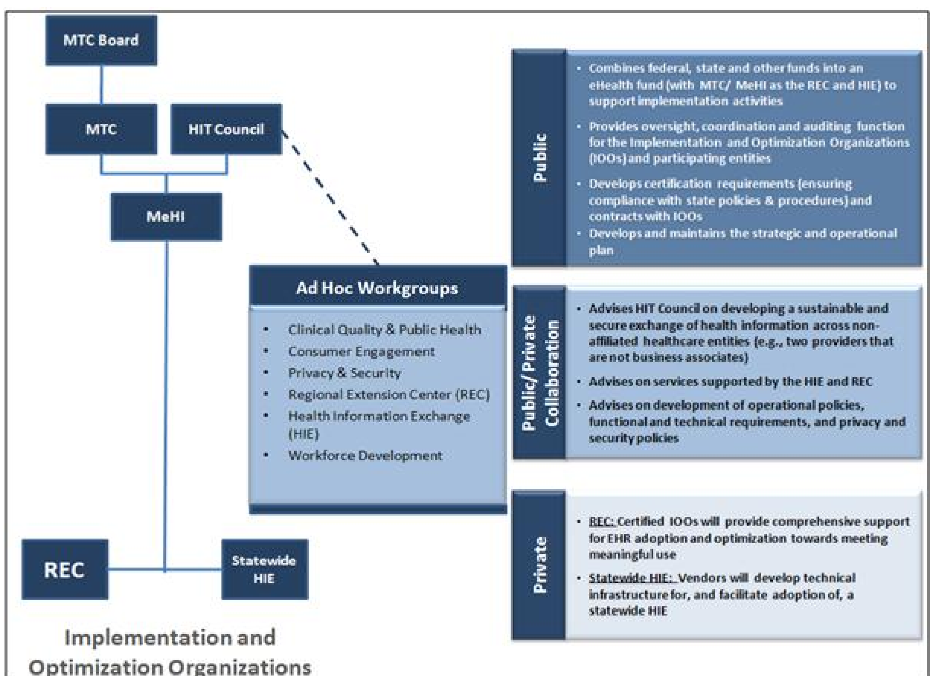


Diagram B.2.2.4: Existing Governance Model

Chapter 305 served as the impetus for the Commonwealth to establish the foregoing Governance structure. A description of Chapter 305 as taken from the Commonwealth of Massachusetts 2010 HIT Strategic Plan is provided below.

B.2.2.5 Chapter 305

In August 2008, the Massachusetts legislature enacted and the Governor signed Chapter 305[22] of the Acts of 2008. The Act to "Promote Cost Containment, Transparency and Efficiency in the Delivery of Quality Health Care" recognized that deploying Health IT is imperative to supporting real health care reform in the Commonwealth. Chapter 305 of the Act addresses cost and quality issues, along with the implementation of Massachusetts's health care access reform by doing the following:

- Setting the goal of implementing EHR systems in all provider settings and integrating those systems through a robust HIE, by January 1, 2015;
- Creating the Massachusetts eHealth Institute (MeHI), a division of the Massachusetts Technology Collaborative and overseen by the Health Information Technology Council (the "Council"), to coordinate public and private initiatives, in support of the statewide deployment of EHR and HIE technologies;
- Using IOOs to support deployment of EHRs and establishment of state-wide HIE;
- Specifying that consent for sharing information through statewide HIE be designed to protect patient privacy and information security, including the patient's choice to participate in sharing their information through HIE at any time; and
- Directing the implementation and dissemination of EHRs to include providers that care for underserved populations, including but not limited to, racial, ethnic and linguistic minorities, uninsured persons, and areas with a high proportion of public payer care.

The current environment scan shows that Massachusetts, not surprisingly, has significant EHR penetration throughout the Commonwealth. Building on the state's early leadership in this area the REC, HIE, and MassHealth will continue to work together through the HIT Council to guide strategic investment and assure that all providers are prepared to meet meaningful use standards with fully interoperable EHR's in place by January 1, 2015.

B.2.2.6 Future Governance

Massachusetts has governance structures in place that can support the full implementation of HIE and the proliferation of EHRs throughout the Commonwealth. It ensures that a mature public-private partnership structure be at the table for necessary decision-making. It is expected that the current governance structure will evolve and adjust to the changing needs throughout the Commonwealth to ensure the goals and objectives of Chapter 305, the statewide HIT Plan, and the SMHP are achieved. The HIT Council will continue to lead efforts for the full realization of the promise of HIT in the Commonwealth. MassHealth and EOHHS will continue to participate and lead, as appropriate.

[22] IBID, page 11

The HIT Council has six established Ad-Hoc workgroups that can be called upon to provide advice and expertise, as needed. The following are the six existing Ad-Hoc workgroups:

1. Clinical Quality and Public Health
2. Consumer Engagement
3. Privacy and Security
4. Regional Extension Center/Electronic Health Records
5. Health Information Exchange
6. Workforce Development

The foregoing description of the Governance structures currently in place in Massachusetts provide ample proof that Governance going forward has been well thought out within the Commonwealth.

B.2.2.7 EHR Activities During the Next Twelve Months

Over the next twelve months, MassHealth will be working in collaboration with MeHI to continue to disseminate information to Providers about opportunities available to them for EHR implementation through the Medicaid EHR Provider Incentive Program. MassHealth's communication goals will be to inform providers about:

- MassHealth's HIT vision, goals and objectives;
- The role of MeHI/HIE as the organization responsible for administration of ONC funds and implementation of the Statewide HIE;
- The role of MeHI/REC as the program that provides oversight of the IOOs and EHR vendors to ensure conformance with state and federal law in the statewide implementation of EHR.
- Education and outreach to encourage the adoption and meaningful use of Federally certified EHRs;
- Eligibility criteria:
  - Registering with the CMS R&A)
  - Gathering data on patient volume
  - Choosing Medicare or Medicaid incentives
- Assistance available to providers through both MassHealth and MeHI; and
- Overview of the MAPIR system with specific emphasis on the provider interface.

MassHealth will coordinate closely with MeHI in tailoring education and outreach to specific provider types. MassHealth will continue to depend on MeHI as the REC and a close partner to provide outreach and education that is focused on MassHealth providers. MassHealth will focus on providing updates to provider materials, web-based materials, and presentations that inform providers of both the state law requirements and the federal funding opportunities around EHRs. As appropriate, MassHealth will coordinate with ONC and CMS on timing and messaging.

MassHealth anticipates their provider communications efforts can be coordinated with outreach efforts directed by CMS, the ONC, and MeHI. MeHI has completed a statewide survey that identifies the current levels of EHR penetration throughout the Commonwealth (please see Section A (The State's "As-Is" HIT Landscape) of this plan for detailed information on the current state of EHR adoption). MassHealth anticipates that, once the SMHP and I-APD are approved by CMS, MassHealth will release official information to describe Medicaid EHR Incentive Payment Program, including program requirements, provider types eligible, the CMS R&A, program oversight, and the application and attestation process. The outreach and education process will need to be reviewed and refined along the way as Federal and

Commonwealth rules change and providers begin to enroll in the Medicaid EHR Incentive Payment Program.

For the Medicaid EHR Incentive Payment Program, Massachusetts will utilize the Medical Assistance Provider Incentive Repository (MAPIR) module *accessed through the MMIS provider internet portal* to allow providers to apply for incentive payments. This will ensure that providers can participate in the program through a familiar portal instead of an entirely new channel. The MAPIR system will both track and act as a repository for information related to payment, applications, attestations, oversight functions, and to interface with the CMS R&A. The MAPIR system will interface both with the MMIS and CMS R&A for:

- Medical Assistance provider information, e.g., provider files, sanctions, licensure, claims;
- Information stored in federal databases concerning the provider that registered for payment at the CMS R&A, e.g., restrictions, incentive program participation in other states and Medicare, etc.; and
- Information collected from providers as they apply to participate in the incentive (NPI, Payee Tax Identification Number, etc.).

The interfaces with existing and planned systems will avoid duplicate reporting and streamline administrative requirements for providers.

B.2.2.8 State Law

Currently, the Commonwealth does not anticipate the need for new state legislation or changes to existing state law in order to implement the Medicaid EHR Incentive Payment Program. The Commonwealth does anticipate, however, the need to promulgate state regulations to implement this program. The regulations will likely detail eligibility for the program, how incentive payments are calculated and how and when payments are made. In addition, the regulations will describe when a provider has the right to appeal a decision related to the Medicaid EHR Incentive Payment Program and how that appeal will be processed. EOHHS intends to begin drafting necessary regulations, utilizing its normal business processes, in the winter of 2011 based on the federal law, federal guidance, and details of the Massachusetts process as defined during the SMHP development process.

B.3 Stakeholder Engagement Process

This sub-section of the Plan is intended to describe how MassHealth involved external stakeholders in the SMHP planning process and summarize the major outcomes of their participation in the process.

As part of developing the overall vision, goals and objectives for the SMHP, we engaged with Commonwealth provider associations to obtain their input. Meetings with seven different provider associations were held between November 22 and December 9, 2010, in various locations throughout the state. The meetings were conducted to gain an understanding of what stakeholders see as most important for the adoption of HIT and EHR technology in the Commonwealth. The following table illustrates the meetings held with provider associations and external stakeholder groups:

External Stakeholder Meetings	
Massachusetts Medical Society	Coalition of Nurse Practitioners
MA Chapter of the American Academy of Pediatrics	Massachusetts Dental Society
MA Association of Behavioral Health Systems	MassLeague (Community Health Centers)
Massachusetts Hospital Association	

Table B.3: External Stakeholder Meetings

In each meeting we reviewed the SMHP project approach and explained why it was important to obtain their input. The goals and objectives that were developed as part of the Statewide Health Information Technology Plan (replace) were reviewed to begin our discussion. It is important for external stakeholders to understand the statewide HIT plan vision, goals and objectives since the SMHP is a component of the statewide plan and must align with it to create a common, consistent vision and direction for HIT. In these meetings, the stakeholders were asked to prioritize the objectives from the statewide plan.

In addition, stakeholders were asked to provide additional thoughts about vision, goals and objectives beyond those documented in the statewide plan. The results of these meetings were presented to the MassHealth Executive Team during the visioning process and will be used to help determine the direction the state will take as it develops its SMHP.

B.3.1 Stakeholder Engagement Conclusions

The provider association groups were largely aware that a statewide HIT planning process had taken place earlier in 2010. In fact, some meeting participants described they had provided feedback or participated when the statewide goals and objectives were developed. However, some were not fully aware, or understand, how the SMHP fits within the statewide plan. For example, some were not aware that development of the SMHP is necessary in order to implement the provider incentive program for EHRs as well as for identifying future MassHealth health information technology initiatives. This lack of understanding from the provider community is common throughout the country and it is the responsibility of state MassHealth agencies to ensure stakeholders gain understanding as their SMHPs are developed, approved by CMS, and implemented in the future.

The results of reviewing the statewide goals and objectives (available in a separate document entitled “HIT Goals and Objectives Ranking”) emphasized that stakeholders need frequent and

clear communication on the SMHP development process and implementation of the Medicaid EHR Incentive Payment Program. They cited as most important the need to improve their understanding of MassHealth plans and initiatives and to ensure that patient information is appropriately protected.

In the stakeholder meetings there was general consensus that all goals and objectives in the statewide HIT plan are important. Meeting participants were asked to provide feedback on the eighteen statewide HIT plan objectives so MassHealth can better understand which objectives are most important to them. The results are provided below:

Ranked as “Most Important”:

Goal	Objective
G3-Efficiency	All payers in the Commonwealth will adopt a single set of Federal standards for eligibility and claims payment processes, which will be incorporated into certified EHRs.
G1-EHR	Assure private and secure electronic access, use and portability of protected health information by all authorized individuals.
G2-Quality	Adopt and promulgate a common set of Health IT enabled quality and safety measures across all payers and providers.
G4-HIE	Support health reform in the Commonwealth, by providing ready access to data and information that is necessary for identification and implementation of key reform policies and strategies, being meticulous about protecting patient information and carefully following the minimum necessary use of information standards.
G1-EHR	Equitably increase the number of providers who can demonstrate meaningful use of interoperable EHRs across all service areas, including rural, suburban and urban areas where health disparities have been identified.
G2-Quality	Adopt meaningful use measures, as defined by the federal government, for reporting purposes across all agencies.

Table B.3.1.1: Objectives Ranked “Most Important”

Ranked as “Important”:

Goal	Objective
G1-EHR	Increase the number of patients whose care is coordinated across disparate delivery systems within the state and across state boundaries.
G2-Quality	Equitably increase the number of ambulatory primary care providers that have re-engineered their care processes, to better manage chronic conditions, through adoption of patient-centered medical home processes and Health IT that supports evidence-based care.
G2-Quality	Commit to the principles that hospitals and health care providers would report quality and safety measures one way, one time and to one place, to ensure they are collected consistently and with minimum administrative burden.
G3-Efficiency	Engage patients to actively participate in managing their health information, their health and their care, and encourage providers to engage with and respond to patients.

Goal	Objective
G3-Efficiency	Patients report more timely, effective and appropriate care, both virtual and face to face.
G2-Quality	Over time, track and improve quality safety measures reporting from EHRs.
G3-Efficiency	Decrease redundant testing.
G4-HIE	Develop and promote effective and accessible disease prevention, health and wellness programs.
G3-Efficiency	Document, track and minimize episodes of futile care.
G4-HIE	Efficiently track and demonstrate improvement in the Commonwealth's key public health initiatives to improve the health of its population, leveraging both local and state Departments of Public Health.
G3-Efficiency	Over time, decrease standardized measures of administrative costs for both payers and providers.
G2-Quality	Leverage existing reporting infrastructure, when appropriate.

Table B.3.1.2: Objectives Ranked “Important”

In addition to providing feedback on the specific objectives above, providers also provided input on high-level goals and objectives for MassHealth. Three key themes gleaned from the feedback we received from stakeholders are identified below:

1. **Funding for EHRs**. Assistance with funding is very important. The Dental Society, Hospital Association and Nurse Practitioners all identified this as being important. Cost was seen as perhaps the largest barrier to adopting EHR.
2. **Meaningful Use.** Clarity and training on meaningful use is important. Lack of clarity of what meaningful use is and how it will be attained was cited.
3. **Communication, Outreach, and Training.** E-mail or electronic communication was cited as being important tools in communicating about health IT.

The meetings with MassHealth external stakeholders provided productive information and feedback that will be considered as the SMHP is developed and implemented. The groups expressed appreciation for being asked for their input and would like to continue participating and working with MassHealth.

B.4 Other State Research

This sub-section of the Plan is intended to describe how MassHealth utilized research conducted on other States as part of the SMHP planning process and to summarize the most significant research results.

As part of developing the Commonwealth's SMHP, independent research was conducted to learn more about efforts in other states related to development of their respective SMHPs, identify potential "MassHealth practices" and collect data about relevant health information exchange initiatives. A structured interview process was utilized that included a series of questions related to the SMHP development process, HIE efforts, and plans for implementing their Medicaid EHR Incentive Payment Program. Ten states were identified and included the other five New England states, and five additional states selected by the SMHP project team. The identified SMHP lead for each state was contacted to complete the research. The states interviewed include:

States Interviewed	
1. Maine	6. Kansas
2. New Hampshire	7. West Virginia
3. Vermont	8. Arizona
4. Rhode Island	9. Virginia
5. Connecticut	10. Pennsylvania

Table B.4: States Interviewed

Although conducting other state research is not a CMS requirement when developing the SMHP, MassHealth wanted to learn more about efforts in other states to help develop their own SMHP. In particular, contacting each of the five other New England states was helpful since some provider organizations and health initiatives cross state lines within the six New England state region. Reaching out to contact the other New England states may help initiate collaborative communications that help jump start future regional, multi-state collaborative initiatives.

B.4.1 Conclusions of State Research

The contacted states were in various stages of SMHP development. Some have approved plans, some are writing their plans now, and some have just begun to draft their plans. Similarly, the states represent the full spectrum of possibility with regards to their current level of HIE planning and EHR survey utilization information. In addition, there exists a wide variety of approaches to conducing Statewide HIT planning, the level of available staff resources for SMHP development, and current status of MITA planning and implementation. Some highlights of these interviews are included below:

SMHP Related Observations:

- All states are closely coordinating their efforts with other designated in-state entities. Most states are using the CMS template for the organization and creation of the SMHP document.
- It was recommended by some states to build extra time into the process for necessary feedback on the SMHP and related communications.
- The majority of the states are not yet leveraging ePrescribing capabilities.

- The status of MITA varied greatly from state to state. Some states last completed their MITA assessment 3 to 4 years ago, some are currently conducting MITA assessments, several have RFPs issued for assistance and a few have planning efforts focused on the next 1 to 2 years.
- One state mentioned they are planning to use the MITA planning model for procuring most new information systems to better leverage and comply with federal standards.

HIE-Related Observations:

- None of the states interviewed are currently passing data between their MMIS and their designated HIE.
- When asked about areas of interdependency between the HIE and the SMHP states listed the following; public health reporting, aligning timing with HIE activities, legislative funding, and governance.
- None of the states identified an operational Master Patient Index at this point in time.

Medicaid EHR Incentive Payment Program-Related Observations:

- Lack of broadband availability is a significant challenge for providers in many states. This may impact provider's ability to connect to HIEs and achieve meaningful use which ultimately may make it difficult for providers to qualify for all available incentive payments.
- None of the states indicated they had completed the planning for the implementation of the Medicaid EHR Incentive Payment Program. However, many have made significant progress in this regard.
- The top items identified as areas of concern among states included; state staff resources, future CMS rules, and the tight timeframe for making incentive payments to providers.

In addition to the above interview and research highlights, detailed meeting notes and other information was collected during the research process. This information will also be utilized by the Commonwealth when further developing and implementing the SMHP. The Commonwealth is grateful for the time and information provided by other states. The Commonwealth plans to share summarized information with the ten states in hope they may also find the information collected helpful for them during their SMHP development and implementation.

Section C: Activities Necessary to Administer the Incentive Program

This Section of the plan provides a description of the major business processes that will be utilized by EOHHS to ensure that EPs and hospitals have met Federal and State statutory and regulatory requirements for the Medicaid EHR Incentive Payment Program.

Introduction:

The Commonwealth's plan to administer and oversee the Medicaid EHR Incentive Payment Program leverages a broad array of existing provider outreach and education, provider enrollment and verification and provider payment processes. The SMHP identifies the key outreach methods to target appropriate Eligible Professionals (EPs) and Hospitals who may qualify for EHR Incentive Payments and then the detailed activities to assist them through the application and verification processes with a goal of avoiding the enrollment or issuance of improper payments to any ineligible EP or Hospital. The plan to oversee and administer the Medicaid EHR Incentive Payment Program has been designed to utilize existing processes wherever possible and to minimize the administrative impact on both providers and state resources.

Included in this section is a description of the procedures MassHealth, MeHI/EVOT and other agency partners will undertake to help ensure EPs and Hospitals have met Federal and State statutory and regulatory requirements in order to receive EHR incentive payments. The plan to administer and oversee the Medicaid EHR Incentive Payment Program includes a detailed description of the processes, business and resource requirements, and assumptions for the administration of the program.

The various activities and business processes described in this section were developed in accordance with the standards set forth by CMS in Final Federal Regulation 42 CFR Parts 412, et al. Medicare and Medicaid Programs; Electronic Health Record Incentive Program; and the Health Information Technology for Economic and Clinical Health (HITECH) Act.

Key Agencies

This section of the plan describes the key actors and agencies that will be involved in administering the Medicaid EHR Incentive Payment Program, the critical information systems that will be created and/or leveraged to issue and track payments and the requirements put forth by the Commonwealth of Massachusetts to promote EHR adoption across all providers.

The **Executive Office of Health and Human Services** is the designated single state Medicaid agency, administering the Massachusetts Medicaid program and the Children's Health Insurance Program (CHIP), collectively known as MassHealth, through its Office of Medicaid. MassHealth provides coverage to all mandatory and optional Medicaid populations. In addition, the Commonwealth has administered an 1115 Demonstration Waiver since 1997, allowing the state to cover childless adults that were long term unemployed.

The **Massachusetts eHealth Institute** (**MeHI**), a division of the Massachusetts Technology Collaborative, is the state's designated institute for health care innovation, technology and competitiveness and is directed by the state's HIT Coordinator. Established by the Massachusetts Legislature via Chapter 305 of the Acts of 2008 *An Act to Promote Cost Containment, Transparency and Efficiency in the Delivery of Quality Health Care*, MeHI is responsible for advancing the dissemination of health information technology across the

Commonwealth, including the deployment of EHR systems in all health care provider settings that are networked through a statewide health information exchange.

MeHI applied for and was awarded HITECH funding under the State Health Information Exchange Cooperative Agreement Program and was selected to serve as the Commonwealth's single Regional Extension Center (REC) for Massachusetts. MeHI/REC has developed an open enrollment process to select Implementation and Optimization Organizations and to sign up providers across the state for Health IT consulting services to promote the adoption of EHRs. MeHI and the HIT Council will develop plans and a framework for making Massachusetts eligible for the maximum amount of near term funding available through the HITECH Act. These resources are expected to help prepare providers in the Commonwealth to qualify for the incentive funds available from the Federal Government.

MassHealth will oversee all planning, operations and administration of the Medicaid EHR Incentive Payment Program. MassHealth intends to expand its current agreement with MeHI to have them assist with enrollment, validation, and outreach activities. MeHI will establish the Enrollment, Validation, and Outreach Team (EVOT) to assist EPs and Hospitals in navigating the application process from start to finish. MeHI/EVOT is the most appropriate entity to support the Medicaid EHR Incentive Payment Program operation since they are a quasi-state agency that has a unique knowledge base of EHR technology and the State's HIT environment, as well as familiarity with the provider community and ongoing support of EHR adoption across the state as per M.G.L. Chapter 305.

Various functional units within EOHHS, **MassHealth Operations** and other contracted **Support Services** (such as MassHealth's Customer Service Team and Provider Compliance Unit) will be involved in the administration and oversight of the Medicaid EHR Incentive Payment Program. A broad range of activities will be performed by various individuals and departments:

- General oversight of the Medicaid EHR Incentive Payment Program including managing and updating HIT I-APDs and other associated IAPDs; project management of the Medicaid EHR Incentive Payment Program; vendor procurement, contracting and management; meeting federal claiming and reporting requirements;
- Program and policy analysis related to Meaningful Use and Medicaid EHR Incentive Payment Program regulations
- Support provider outreach and education;
- Call center support;
- Provider eligibility support;
- Verifying specific enrollment criteria;
- Enrolling certain provider types to receive EHR Incentive Payments;
- Maintaining an up-to-date MassHealth provider table;
- Processing provider payments through MMIS;
- Coordination with provider compliance activities;
- Provider reconsideration and appeals processes;
- Fraud/Abuse and Auditing;
- Data Warehouse reporting for MAPIR and other benchmarks;
- Support planning, implementation, testing and development of Massachusetts' specific Medical Assistance Provider Incentive Repository (MAPIR) interfaces and customizations; and
- Participation on various multi-state collaborations such as MAPIR Steering and Technical Committees and NESCSO.

Systems and Data Sources to Support the Medicaid EHR Incentive Payment Program

Massachusetts has opted to utilize the **Medical Assistance Provider Incentive Repository (MAPIR)** a software product currently in development by Hewlett-Packard Enterprise Services in collaboration with a consortium of 13 states. This multi-state collaboration will reduce duplication of effort and make the most cost-effective use of state and federal funds. MAPIR will link with the state's Medicaid Management Information System (NewMMIS) and with the CMS R&A to collect registrations from EPs and to guard against duplicate payments. In Massachusetts, Providers will be able to access the MAPIR system via an existing secure Web-based portal (POSC via the Virtual Gateway) and provide required information and attestations. Department personnel will use MAPIR to track application and decision status, attach notes and documents to provider records and generate electronic provider correspondence.

In addition, MAPIR will contain a series of edits and checks that will be used during the provider application and enrollment process, e.g., confirmation of CMS R&A information, patient volume, and attestations. The application, attestation, and eligibility processes are described in more detail in Section C.2 (Provider Enrollment and Eligibility Verification) and Section D (The State's Audit Strategy) describes how the Commonwealth will use MAPIR in program oversight and auditing.

Massachusetts' **NewMMIS** system came on line in May 2009 and it serves 1.4 million Medicaid members, maintains a provider network of 30,000 providers and processes roughly $8 billion Medicaid claims and managed care capitation payments to providers annually. The legacy MMIS was out of date, hindered the Commonwealth's ability to be creative and flexible in program design and lengthened the time required to implement program initiatives such as cost containment. The effort and scope of the NewMMIS project required collaboration among all agencies within EOHHS, the state's Information Technology Division (ITD), the State Comptroller, and the Commonwealth Health Insurance Connector Authority[23]. Provider EHR Incentive Payments will be paid via the NewMMIS and some provider enrollment processes and verification will be performed in the NewMMIS system.

MassHealth maintains a robust **Data Warehouse** with vast enrollment, eligibility, claims, encounter, payment, member demographics, patient characteristics, patient discharge, and other data that supports the MassHealth service delivery and payment systems. The MassHealth Data Warehouse will be integral in the implementation of the Medicaid EHR Incentive Payment Program and its encounter and fee-for-service (FFS) claims data will serve as the basis for verifying Medicaid Patient Volume numerators. The MassHealth Data Warehouse will also maintain information related to some Meaningful Use and clinical quality measures which will populate specific elements of the required Medicaid EHR Incentive Payment Program Quarterly and Annual reports.

Massachusetts, through its Division of Health Care Finance and Policy (DHCFP), maintains an "**All-Payer Claims Database**," (**APCD**). The database is currently being expanded, and when fully developed, it will comprise medical claims, dental claims, pharmacy claims, and information from member eligibility files, provider files, and product files including fully-insured, self-insured, Medicare, and Medicaid data. When expanded, the APCD will provide accurate counts for the total number of active providers, and the number of total patient encounters for each provider, so that Medicaid patient thresholds (both numerator and denominator) can be verified by Medicaid EHR Incentive Payment Program verification and enrollment staff as required by

[23] http://www.nascio.org/awards/nominations/2010/2010MA7-NewMMISnomination_June_Final_sbe-1.pdf

federal SMHP guidelines. Currently, MassHealth has access to the number of Medicaid/1115 Waiver encounters and FFS claims for MassHealth participating providers through its Data Warehouse and by January 2012, Medicaid EHR Incentive Payment Program will have access to both the numerator and denominators for Medicaid patient threshold percentage calculations through the APCD.

Division of Health Care Finance and Policy **DHCFP 403**, Hospital Statement of Costs, Revenues and Statistics Report is required to be completed by every hospital in Massachusetts. The 403 annual report will complement the CMS 2552-96 and 2552-10 reports in calculating Average Length of Stay Information. In addition, the CMS 2552-96 and 2552-10 in conjunction with the 403 annual report will be the source of the Average Growth Rate, Total Inpatient Discharges, Medicaid Inpatient Bed Days, Total Inpatient Bed Days, and Total Charges which will be used to calculate and verify the Hospital EHR Incentive payment amount.

Supporting Legislation

The Commonwealth of Massachusetts has a history of striving to be a national leader in the area of Health Information Technology (HIT), and in Electronic Health Record (EHR) adoption in particular. Massachusetts has been working for several years to move the Commonwealth strategically towards a health care system that is capable of delivering important clinical information at the point of care delivery in order to improve health outcomes for the population. In 2008, Massachusetts enacted M.G.L. Chapter 305 which, among other provisions, mandates that all providers have interoperable electronic health records in place no later than January 1, 2015. This law is consistent with federal law and regulations. Massachusetts sees the SMHP as one piece of the larger statewide health information technology planning and implementation effort.

Work Performed:

In order to draft the plan to oversee and administer the Medicaid EHR Incentive Program, a full assessment of Federal Regulation 42 CFR Parts 412, et al. Medicare and Medicaid Programs; Electronic Health Record Incentive Program; was completed to detail the requirements based upon the final rule. The attached Appendix B (SMHP Requirements Crosswalk) summarizes federal requirements, assigns each requirement to a specific business process, and identifies where in the SMHP the answer to each federal requirement can be found. As a result of this review, four operational activities/business processes were identified that were essential to administer and oversee the Medicaid EHR Incentive Program (Medicaid EHR Incentive Payment Program):

1. Outreach and Provider Education;
2. Provider Enrollment and Eligibility Verification;
3. Payment Processing; and
4. Reconsideration and Provider Appeals.

Business process meetings were conducted with EOHHS, MeHI and other support staff in order to develop business process descriptions and workflow diagrams. Resources needed to support the various operational activities required to administer the Medicaid EHR Incentive Payment Program were also identified during the requirements gathering process. Throughout the process Massachusetts sought to leverage existing resources and enhance productivity and functionality of those resources wherever possible, through the administration of the Medicaid EHR Incentive Payment Program.

The following provides a summary of the key tasks that were performed as a part of defining the activities needed to administer and oversee the Medicaid EHR Incentive Program:

- Review of Final Rule to verify program requirements;
- Development of business processes, data tables, and process workflow diagrams;
- Assessment of current MassHealth operations that may support the program;
- Identification of potential changes to current policies;
- Identification of implementation risks based on regulatory, resource or other constraints;
- Evaluation of current and future resource needs;
- Identification of system changes necessary to support business processes; and
- Development of functional roles for MassHealth and MeHI related to Medicaid EHR Incentive Payment Program.

Organization of this Section:

Section C (Activities Necessary to Administer the Medicaid EHR Incentive Payment Program) of the SMHP is based on Massachusetts' assessment of the final rules governing the Medicaid EHR Incentive Program and guidance provided by CMS in subsequent templates, State Medicaid Directors letters, and other communications and documentation. The subsections of Section C depict the major business processes that will support the Medicaid EHR Incentive Payment Program:

Sub-Section	Contents
C.1 Provider Outreach and Education	Describes a strategy to increase provider awareness of the Medicaid EHR Incentive Payment Program and defines the roles that the State Medicaid Agency, Regional Extension Center, Professional Organizations and others will have in increasing provider participation in the program.
C.2 Provider Enrollment and Eligibility Verification	Describes how EPs and Hospitals will apply for the program and the process for looking behind provider attestations. Also includes the methodology used to calculate payments using MAPIR and Hospital cost reports.
C.3 Payment Processing	Describes the process and frequency for issuing and tracking EHR incentive payments to EPs and Hospitals.
C.4 Reconsideration and Provider Appeals	Details the process to allow EPs and Hospitals to request reconsideration of an initial determination or appeal a final determination made by MassHealth.

Table C.1: Sub-Sections of Section C (Activities Necessary to Administer the Medicaid EHR Incentive Payment Program)

Sections C.2, C.3 and C.4 include business process workflows and verification tables as deemed necessary for each respective business process. The following table contains a brief summary of what is covered in each of the four sub-sections in Section C.

C.1 Provider Outreach and Education

This sub-section of the plan is intended to describe the activities and plans for Provider Outreach and Education. This sub-section includes a communication and marketing vision, fundamental messages to communicate, core strategies for communication, identification of key communicators, and a high-level communication plan.

Effective communication to both public and private stakeholders regarding the Commonwealth's plan for outreach and provider education is a critical element of the Statewide Medicaid Health Information Technology Plan (SMHP). Additionally, Section A (The State's "As-Is" HIT Landscape) of the Plan provides a description of the major organizations and governing bodies that will support the Medicaid EHR Incentive Payment Program and Provider Outreach and Education and the current efforts underway to create a seamless and streamlined communication plan for EHR adoption. HIT objectives for the Commonwealth are articulated Section B (The State's "To-Be" Landscape) of the Plan.

A Communication and Marketing Plan was developed cooperatively between MeHI and MassHealth to create a framework and strategy for the activities and methodologies that will be used to help to ensure the Medicaid EHR Incentive Payment Program is visible, easily understood, and adoptable by the Commonwealth's providers. These plans identify critical components of the outreach and Provider education activities that need to occur to support the Medicaid EHR Incentive Payment Program and have been summarized below.

C.1.1 Vision for Communication and Marketing

The Commonwealth will successfully communicate the availability of incentives and requirements of the Medicaid EHR Incentive Payment Program through a broad range of communication methods. Full execution of the communication plan will enable Eligible Professionals to make educated and informed decisions regarding the benefits and advantages of participating in the Medicaid EHR Incentive Payment Program in Massachusetts. The plan will also reach MassHealth eligible consumers with critical information on the benefits of EHRs.

C.1.2 Goals for Provider Communication and Outreach

The overarching goal of the Communication and Marketing effort is to recruit greater than 85% of eligible health care professionals and hospitals to leverage the incentives that will enable implementation of EHR systems using MassHealth communication staff and communication channels in conjunction with the EVOT Outreach Team.

The primary role of the Outreach Coordinators on the EVOT team will be informing and educating providers on the Medicaid EHR Incentive Payment Program registration, enrollment, and attestation process as well as general program requirements. They will target all eligible Medicaid provider types (including dentists, MDs and ODs both primary care and specialists, mid-level providers, and hospitals in all practice settings). During the course of their outreach efforts, they will make providers aware of the technical assistance services and vendor support that are available through the REC for both priority providers and non-priority providers including specialists.

A secondary goal is to utilize MeHI as the state's designated entity, as the organization that Massachusetts providers/consumers can rely on to find information about EHR implementation and optimization, user guidelines, and both the Medicaid and Medicare EHR Incentive Payment Program requirements. The key to the program's success is to engage, educate, and recruit

Eligible Professionals and Hospitals by building awareness, creating transparency, and providing appropriate support.

C.1.3 Core Strategies for Provider Outreach and Education

Developing, maintaining, and altering strategies for effective communication and outreach will be required throughout the lifetime of the EHR Incentive Payment Program. A three-phased process for provider outreach and education will be followed. Although there is a linear, time-based progression to these activities, all three phases will continue into live operation of the program. In other words, activities across all three phases (planning & initiation, education, and pre-launch) will continue throughout the life of the program, being modified appropriately as the EHR Incentive Program evolves. The three phases include:

1. **Plan and Initiate Communication Strategies (Fall 2010/Winter 2011):**

   a. Create a Communications Task Force to evaluate and recommend awareness, education, and implementation opportunities for communication and training. (Representation from publications, CST, Provider relations, EOHHS Project Manager, MassHealth Hospital/EP Primary contacts, MeHI, and IT);
   b. Conduct training to MeHI and MassHealth Customer Support Team call center staff to achieve seamless transitions of Medicaid EHR Incentive Payment Program related calls from one call center to the other, the ultimate goal being a single point of entry for providers call in and receive information related to the Medicaid EHR Incentive Payment Program and other HIT activities and resources ;
   c. Determine immediate as well as long range opportunities for co-branding between MeHI and MassHealth and analyze the impact this will have on outreach and education;
   d. Analyze data to identify high volume Medicaid providers based on Managed Care Organization encounter and fee-for-service claims data and develop a plan for targeted Medicaid EHR Incentive Payment Program outreach to those high volume identified providers;
   e. Coordinate content and access between MeHI and MassHealth Medicaid EHR Incentive Payment Program websites as well as other websites within the Commonwealth that deal with HIT initiatives;
   f. Develop an approval and coordination process for EHR provider outreach content through EOHHS/MassHealth;
   g. Develop marketing materials that explain a wide range of EHR topics; for example, Chapter 305, EHR adoption, EHR organizations and responsibilities, and EHR Incentive Payment Program process descriptions;
   h. Begin MassHealth Member/Advocate awareness and communication activities; and
   i. Organize, promote and convene Medicaid EHR Incentive Payment Program Provider Summits and Overview Presentations with MassHealth and MeHI staff across the state.

2. **Initial Education (Begins Prior to CMS SMHP and HIT I-APD Approval):**
   a. Creation and posting of a Provider Medicaid EHR Incentive Payment Program Toolkit on MeHI and MassHealth websites including, but not limited to:
      - Frequently asked question documents;
      - Checklists for key aspects of the EHR Incentive Payment Process; such as how to apply to the CMS R&A, steps required to access the POSC/MAPIR, the appeals process, etc.;
      - Fact sheets; and

- EHR Incentive Payment Program Process descriptions.

b. Finalize the array of co-branded outreach and education materials to be used to support the program.
c. Effectively communicate the types of training available at the associations to Providers.
d. Continue to hold Medicaid EHR Incentive Payment Program Provider Summits and Overview Presentations with MassHealth and MeHI staff throughout the state.

Post I-APD Approval and Ongoing Communication Activities:

a. MassHealth and MeHI would author Provider Checklists that would inform providers about the Medicaid EHR Incentive Payment Program and enrollment process. These checklists include (but are not necessarily limited to):
   - Enrollment in the EHR Program;
   - Eligibility in the EHR Program;
   - Certifying Meaningful Use; and
   - Reconsideration and Appeals process.
b. Establish core communications and marketing campaigns that leverage effective, timely communications. Refer to the MeHI/MassHealth Communication and Marketing Plans including the development and launch of both the Provider EHR Resource Wizard and MeHI/MassHealth co-branded website tentatively named "EHR Express";
c. Encourage provider participation in training and ensure that training can satisfy CPE requirements of Providers. It will be important to identify CPE hours that qualify for each training activity; and
d. Continue to hold Medicaid EHR Incentive Payment Program Provider Summits, Webinars, and Overview Presentations with MassHealth and MeHI staff throughout the state.

C.1.4 Key Communicators

The responsibility for reaching out to consumers and providers and informing them about the program (EHR technologies, incentives, Meaningful Use, eligibility, how to apply, and what to expect, etc.) is a complex effort that will require assistance from many organizations. These include (but are not limited to); MassHealth, MeHI, the Regional Extension Center, and their network of approved Implementation Optimization Organizations, CMS, and Professional Associations.

C.1.4.1 MassHealth

The MassHealth program provides comprehensive health insurance, or help in paying for private health insurance, to more than one million Massachusetts children, families, seniors, and people with disabilities. MassHealth has a responsibility to its members to help communicate awareness of EHR incentives to providers and consumers, and effectively oversee the distribution of incentive funds from the Federal government to Massachusetts-based providers. When thinking of MassHealth in relation to the EHR Incentive Payment Program it's important to consider the various divisions/teams that support this program on behalf of the Commonwealth:

- MassHealth Operations (Provider operations, claims operations, publication, board of hearings, contracts office, eligibility operations, member policy/implementation and evaluation);
- Customer Service Team;

- Virtual Gateway Team;
- NewMMIS Team;
- Office of Acute and Ambulatory Care;
- Office of Clinical Affairs;
- Provider Compliance Unit; and
- Division of Health Care Finance and Policy.

C.1.4.2 Massachusetts e-Health Institute (MeHI)

MeHI currently supports two separate and distinct programs and is proposing to support a third, the Enrollment, Validation and Outreach Team (MeHI/EVOT), that will carry-out incentive payment activities as described in Sections C and D of the SMHP. MeHI's programs are described in more detail below:

1. **Regional Extension Center Program (MeHI/REC):** The structure of this program is based on the use of Implementation and Optimization Organizations (IOOs) to provide implementation services to physicians. The IOOs are contractually obligated to provide the services to guarantee that providers achieve meaningful use. The MeHI/REC program provides oversight of the IOOs and EHR vendors to ensure conformance with state (including Chapter 305) and federal law in the statewide implementation of EHR. MeHI/REC administers ONC "direct assistance" to priority primary care providers who meet federal grant guidelines;
2. **Health Information Exchange Program (MeHI/HIE):** The structure of this program is based on the use of a diverse group of public and private stakeholders to support a "network of network" approach to a Statewide HIE. The MeHI/HIE role is to provide administration of the ONC Cooperative Agreement funds and to ensure the effective implementation of the Statewide HIE. MeHI/HIE will procure and contract with vendors to deploy and operate the Statewide HIE services; and
3. **The Medicaid EHR Incentive Payment Program Enrollment, Validation, and Outreach Team Program (MeHI/EVOT):** The structure of this program is based on a separate and distinct operational team that will support the Medicaid Incentive Payment Program through an agreement with EOHHS. The MeHI/EVOT role will be to provide incentive program enrollment, validation, and outreach support services to providers. MTC shall track and report on the MeHI/EVOT activities separately from the other MeHI activities. MTC shall use its accounting and financial systems for the MeHI/EVOT in a similar manner to its tracking for other programs, including federal grants. The financial systems shall segregate all revenues and expenditures associated with MassHealth and Incentive Program activities.

Regional Extension Center

As the State's designated agency to receive HITECH funding under the State Health Information Exchange Cooperative Agreement Program, MeHI/REC will serve as the single Regional Extension Center (REC) for the entire Commonwealth. Through the MeHI/REC, the Commonwealth will provide assistance to priority primary care providers to promote implementation of EHRs. Priority primary providers include primary care providers in individual and small practices (ten or fewer professionals with prescriptive privileges) principally focused on primary care; public and critical access hospitals; community health centers and rural health clinics; and other settings that predominantly serve uninsured, underinsured and medically underserved populations.

The MeHI/REC business model involves establishing agreements with approved Implementation and Optimization Organizations (IOOs) to deliver HIT services that will support adoption and meaningful use of certified EHRs within the physician offices. The IOOs will in turn contract with providers to offer a full range of adoption and meaningful use support services, including clinical and technical implementation. Once providers are operational, the IOOs will assist providers with Chapter 305 compliance and eligibility for participation in the Statewide HIE. This model provides unique benefits and efficiencies, as it will permit the Commonwealth to harness the services of all of the highly experienced MeHI/REC approved IOOs in the state simultaneously, thus accelerating the goal of statewide EHR adoption. MeHI/REC will provide value-added services for all participating providers.

MeHI will provide value-added services for all participating REC providers. Through the use of clinical relationship managers, the REC will provide education on meaningful use, HIEs and advanced compliance. In addition, the REC will provide the following initial and ongoing services:

Initial REC Services Provided:

- Provide education, including REC program overview and State and Federal Health IT Programs;
- Promote financing alternatives, such as Loan Programs;
- Certify IOOs and establish required contract provisions between providers and IOOs;
- Evaluate and structure arrangements with EHR and other vendors;
- Consolidate and aggregate practices by geography and timeframe for more efficient implementations;
- Supply readiness assessment tool for provider pre-qualification; and
- Establish standardized contract provisions.

Ongoing REC Services Provided:

- Communicate to providers and consumers for targeting, education and outreach;
- Coordinate Community of Practice (CoP);
- Provide Medicaid Provider Incentive Payment Program operational services pending CMS approval; and
- Provide ongoing education and support for Federal and State Health IT compliance including Meaningful Use, HIPAA, HIE, Chapter 305, Quality Improvement Coaching and Privacy and Security.

Implementation and Optimization Organizations (IOOs)

MeHI/REC has entered into agreements with approved Implementation and Optimization Organizations (IOOs) to deliver Health IT services that will support adoption and meaningful use of certified EHRs within the physician offices. The IOOs will in turn contract with providers to offer a full range of adoption and meaningful use support services, including clinical and technical implementation. Once providers are operational, the IOOs will recommend them as compliant with Chapter 305 and eligible for participation in the Statewide HIE. This model provides unique benefits and efficiencies, as it will permit the Commonwealth to harness the services of all of the highly experienced MeHI/REC approved IOOs in the state simultaneously, thus accelerating the goal of statewide EHR adoption. Coordination and training between MassHealth and MeHI/REC will be critical for IOOs to ensure IOOs are upto speed on EHR Incentive Program changes and acceptable State processes when communicating directly with Providers.

C.1.4.3 Professional Associations

MassHealth has initiated contact with various associations to leverage their existing networks, websites and ongoing outreach activities. MassHealth began quarterly outreach to these groups in December 2010 and will continue to provide updates and status of the Medicaid EHR Incentive Payment Program through planning, implementation, launch and operations of the program. The outreach, education groups, and professional associations that have been targeted by MassHealth include (but are not limited to):

- Consumer Advocacy Groups;
- HIT Council;
- Program of All Inclusive Care for the Elderly (PACE Providers);
- Large delivery systems and group practices(such as the Beth Israel Deaconess Physician Organization);
- Massachusetts Association of Health Plans;
- Massachusetts League of Community Health Centers;
- MassHealth Managed Care organizations, such as the Neighborhood Health Plan, Network Health, HealthNet, and Fallon;
- Massachusetts Hospital Association;
- Nurse Practitioner Association;
- Visiting Nurses Association;
- New England Chapter of HIMSS;
- Commonwealth Health Insurance Connector Authority;
- The American Academy of Family Practice Physicians (Mass. Chapter);
- American Academy of Pediatrics (Mass. Chapter);
- American College of Physicians (Mass. Chapter);
- Massachusetts Medical Society; and
- Massachusetts Dental Society.

C.1.4.4 Centers for Medicare & Medicaid Services (CMS)

The Centers for Medicare & Medicaid Services (CMS) is a federal agency within the United States Department of Health and Human Services (HHS) that administers the Medicare program and works in partnership with state governments to administer Medicaid, the Children's Health Insurance Program (CHIP), and health insurance portability standards. In addition to these programs, CMS has other responsibilities, including the administrative simplification standards from the Health Insurance Portability and Accountability Act of 1996 (HIPAA), quality standards in long-term care facilities through its survey and certification process, and clinical laboratory quality standards under the Clinical Laboratory Improvement Amendments.

MassHealth intends to leverage the wide array of Medicaid EHR Incentive Payment Program related materials that have already been developed by CMS to assist in implementing the Medicaid EHR Incentive Payment Program in this state. Key project staff will continue to participate in all-state calls to remain informed about ongoing policy clarifications and guidance related to Medicaid EHR Incentive Payment Program administration. In addition, MassHealth staff will continue to participate in national conferences where CMS staff are frequent speakers and learn from other States' experiences relative to adoption of their own Medicaid EHR Incentive Payment Programs. CMS will remain a valuable resource to the MassHealth, Consumers, and Providers in Massachusetts.

C.1.5 Other Communicators

Additionally, there are many trusted groups that can help to identify Eligible Professionals and assist in publicizing and promoting EHR including;

- Group Insurance Commission;
- Academic Institutions;
- Community Colleges;
- Community Health Centers;
- Massachusetts Health Data Consortium;
- Board of Registration in Medicine; and
- Board of Dentistry.

Ad-hoc workgroups that represent a broad range of health care, education, consumer, security, technology, governmental, and legal interests have been established by the Commonwealth to advise the HIT Council governance group. Contributions by these workgroups will assist to build confidence and support for EHR among providers and consumers. Examples of related work groups include (but are not necessarily limited to):

- Clinical Quality and Public Health;
- Consumer Engagement;
- Privacy and Security;
- Regional Extension Center (REC)/Electronic Health Records (EHR);
- Health Information Exchange; and
- Workforce Development.

Various levels of government and their outreach and education channels will be leveraged to increase awareness of the Medicaid EHR Incentive Payment Program and encourage eligible provider types to participate. Such entities include:

- The Federal Government provides the EHR incentives and oversees the initiative, which include the Office of the National Coordinator (ONC) and the Centers for Medicare & Medicaid Services (CMS);
- Local government orchestrates and facilitates local and regional kick-off events, and will help to educate providers and consumers in their communities;
- Massachusetts legislature is responsible for policy and provides incentives, while also assisting educational efforts to reach providers and consumers; and
- Public agencies implement federal and state policies governing the program and facilitates the initiative.

C.1.6 Fundamental Messages to Communicate

Below are a few of the most critical messages that will be delivered as part of Communication and Marketing strategies developed by the Commonwealth:

- M.G.L. Chapter 305 requires EHR adoption by all Commonwealth providers;
- EHR’s will improve the quality of health care and make practicing medicine more efficient;
- Providers will have help in acquiring EHR systems:
    - Through Medicaid and/or Medicare incentives;
    - Through low interest loans for the purchase of the EHR; and

  - Through an Implementation and Optimization Organization (IOO) grant (for providers of a certain size, etc.).
- Medicaid incentive payments will be made through a streamlined process;
- EHR incentive payments are separate from incentive payments from any other payers;
- Providers will have help in implementing and operating EHR systems:
  - The Commonwealth's REC/IOO organizations will provide assistance;
  - MassHealth will provide appropriate assistance for implementation and operation of EHR systems;
  - Eligibility wizard and eligibility checklists will be available;
  - Toolkits will be made available to create awareness, build understanding;
  - A single-point of entry website (tentatively titled "EHR Express") supported by MeHI with appropriate links to other sites; and
  - A single-point of entry for call center support that will direct the call seamlessly to the appropriate call-center.
- Acknowledge that the transition from a paper-based record to EHR technology can be difficult, but if the systems are implemented properly, and the physician is championing the effort, the end result will lead to improved office processes, enhanced quality and safety, and increased patient satisfaction;
- Support will be given to providers/consumers who need help learning about the program, and are interested in the adoption and optimization of EHR systems;
- In addition to bringing EHR's to providers who are not currently using this technology, the plan for provider outreach will also help Eligible Professionals achieve and maintain "meaningful use";
- EOHHS is mindful of the competing priorities for providers in the industry and will support activities that simplify the EHR Incentive Program as much as possible; and
- In-service training and presentations will be provided to EP's and hospitals.

C.1.7 Methods of Communication

There are several methods of communication that the Commonwealth will utilize to reach out to providers and consumers and the strategies put forth in the draft Communication and Marketing plan developed by MeHI serves as a strong starting point for all proposed Medicaid EHR Incentive Payment Program communications. For the purposes of this section of the SMHP the various approaches and methods of communication include, but are not limited to:

- Annual EHR Adoption Provider Survey;
- Development of an easily recognizable logo and brand used on all marketing materials;
- Leveraging Professional Networks;
- Provider resource center/website that includes:
  - 508-compliant website/portal for "one-stop" shopping "EHR Express";
  - Link to the CMS website on EHR incentives;
  - Link to the CMS website on HIT initiatives at State and Federal levels;
  - Training for MassHealth providers and MeHI Clinical Relationship Managers;
  - Communication materials specific to MassHealth's planning activities;
  - Provide online access to EHR, Meaningful Use, and other program information;
  - Provide access to an Eligibility Wizard for EHR incentives;
  - Step-by-step guides to applying for the Medicaid EHR Incentive Payment Program;
  - Breaking news and updates about the program; and
  - Webinars and video testimonials from providers utilizing EHR technology.
- Provider communications;

- MeHI staff have participated in a series of education summit meetings across the Commonwealth to introduce health care providers to the services and benefits available and will continue to provide information and support throughout the duration of the Medicaid EHR Incentive Payment Program;
  - Leverage existing MassHealth communications:
    - ✓ Provider On-line Service Center (POSC);
    - ✓ Virtual Gateway (VG);
    - ✓ Provider newsletters;
    - ✓ E-mail blasts and list serves; and
    - ✓ Remittance communications (Banner Messages).
  - Telephone Hot Line, Call Center Operations, and Telephone Outreach.
- Brochures and Fact Sheets;
  - Multiple full-color, tri-folds and multilingual EHR marketing materials;
  - A consumer-focused tri-fold for retail (including supermarkets and pharmacies);
  - Fact sheets and Frequently Asked Questions; and
  - Fact sheet to educate consumers about the safety and security of EHR.
- PowerPoint Presentations;
- Appropriate use of Social Media;
  - YouTube;
  - Facebook;
  - Twitter;
  - LinkedIn;
  - Blogger; and
  - Flickr.
- Print and Television Advertising as deemed appropriate by MassHealth.
  - Take advantage of the “T” (the Commonwealth’s public transportation system).

C.1.8 High-Level Communication Matrix

The Commonwealth will continue to leverage outreach and educational tools provided by other states and the Federal government. To educate its providers, MassHealth plans to leverage the ongoing education efforts and resources of the Regional Extension Center to support outreach to providers, in an effort to assist Medicaid EP’s in achieving meaningful use and qualifying for HITECH incentive payments. Equally important to educating providers, MassHealth will provide education and program outreach to its own staff including training, program support, revised business processes) etc. within EOHHS as a whole and MassHealth in particular. The following table summarizes the method of communication, and identifies the key communicator with responsibility for delivering each method of communication.

		MeHI/MTC				
Method of Communication	**MassHealth**	**MeHI/ EVOT**	**MeHI/ REC**	**IOOs**	**CMS**	**Professional Associations**
Call Center Operations	✓	✓			✓	
Call Center – Provider IVR (Interactive Voice Response)	✓	✓				
Email Blasts	✓	✓	✓			✓
EHR Incentive Program’s Eligibility Decision Tool			✓		✓	

Method of Communication	MassHealth	MeHI/MTC: MeHI/ EVOT	MeHI/MTC: MeHI/ REC	MeHI/MTC: IOOs	CMS	Professional Associations
"wizard"	✓					
Help Desk Support	✓	✓			✓	
MeHI/REC IOO Visits and Presentations			✓	✓		
Marketing Campaigns	✓	✓				
Newsletters – General	✓	✓	✓			✓
Newsletters – HIT Specific			✓			
Patient centered medical home initiative training/coaching	✓					
Medicaid EHR Incentive Payment Program Provider Checklists and Toolkit	✓	✓	✓	✓		
Regular Provider Meetings	✓		✓	✓		✓
Remittance Advice Communications	✓					
Social Media	✓	✓	✓	✓	✓	✓
Special Provider Meetings, EHR HIT Focused	✓	✓	✓	✓	✓	✓
Training; Staff Training (EHR Program)	✓	✓	✓	✓	✓	✓
Training; Provider (EHR Program)	✓	✓	✓	✓	✓	✓
Training; Provider (Web-based)	✓	✓	✓	✓	✓	✓
Training; Provider (in-service, face-to-face)	✓		✓	✓		✓
Website – "EHR Express"	✓	✓				
Website – Other	✓	✓	✓	✓	✓	✓

Table C.1.9: High-Level Communication Plan

MassHealth plans to leverage existing EOHHS/MassHealth meetings and forums which occur at regular intervals, for example:

- Partner's Association Meeting (bi-monthly);
- Massachusetts Health Care Training Forum (Quarterly);
- PCC Plan Meeting (Quarterly);
- Providers Association Meeting (Quarterly);
- Massachusetts Hospital Association Workgroup Meeting (Quarterly); and
- MassHealth Newsletters (Monthly).

Because MassHealth, MeHI/REC and IOOs will each be responsible for carrying a consistent message to members and providers, coordination and training among these organizations will be critical. The Communication Task Force used to evaluate and recommend awareness, education, and implementation opportunities will also be responsible for developing policies and procedures that will help to ensure these organizations are appropriately aligned with their communication and educational outreach activities, literature, training materials, etc. Throughout the course of the Medicaid EHR Incentive Payment Program, the Communication Task Force will evaluate, revise and update marketing, communication and outreach materials based on gaps in adoption rates, rule changes or provider needs. Further refinement of this High-Level Communication Plan will also be the responsibility of the Communication Task Force and changes to overall communication strategy will be submitted in future updates to the HIT Plan.

C.2 Provider Enrollment and Eligibility Verification

This sub-section handles the Provider Enrollment and Eligibility Business Processes. It includes the activities required to enroll an EP/Hospital in the Medicaid EHR Incentive Payment Program, and subsequently determine eligibility for payments.

The plan to administer and oversee the Medicaid EHR Incentive Program includes a detailed description of the processes, business and data requirements, and assumptions for the administration of the program. Included in the plan is a description of the processes and procedures that MassHealth, the Regional Extension Center (MeHI) and other agency partners will undertake to help ensure Eligible Professionals (EPs) and Hospitals have met Federal and State statutory and regulatory requirements in order to receive EHR incentive payments.

The Provider Enrollment and Eligibility Verification process includes investigating provider attestations, conducting a series of pre-payment verifications and calculating the EHR incentive payment. The Medicaid EHR Incentive Payment Program leverages many of the current provider enrollment, provider maintenance and provider compliance processes that are in place.

As described earlier in this Section, it is the Commonwealth's intent to use MAPIR to administer EHR Incentive Payments. MAPIR captures provider information submitted during the application and attestation process and will apply real-time edits to verify that values entered are valid and that required fields are completed. The MAPIR web-based form will allow the provider to save the partially-completed application, exit the system, and return later to complete the form.

The MAPIR system will interface both with the MMIS and CMS R&A for:

- Medical Assistance provider information, e.g., provider files, sanctions, licensure, claims Information stored in federal databases concerning the provider that registered for payment at the CMS R&A, e.g., restrictions, incentive program participation in other states and Medicare, etc.; and
- Information collected from providers as they apply to participate in the incentive (NPI, Payee Tax Identification Number, etc.).

In MAPIR Providers will need to attest to the information they have provided. MeHI/EVOT and MassHealth will then need to review these attestations and information provided in MAPIR in order to determine if the provider's information has been verified for payment – these verification activities comprise Pre-Payment Verification and are described in more detail below. This business process also includes a high-level description of how certain providers will be enrolled in the Medicaid EHR Incentive Payment Program via a special enrollment process. Once the EP and Hospitals are enrolled and the application is finalized in MAPIR via an electronic signature from the provider, payment processing begins and follows the same steps that are followed for all Medicaid provider payments (described further in Section C.3 Payment Processing). This electronic signature must be in compliance with the Massachusetts Uniform Electronic Transactions Act (MUETA) requirements for valid electronic signatures in the Commonwealth.

Once a payment approval has been made, the payment information will be sent to the CMS R&A, which will then confirm and register the payment and give the state the go-ahead to make the payment. The State's MMIS will then generate a check for the provider. *The notification that is sent to the provider (via email) will include a reminder that Medicaid EHR Incentive Payments are viewed as taxable income by the IRS.*

C.2.1 Trigger Event

The Provider Enrollment and Eligibility Verification business process is initiated when an EP or Hospital submits an application through the CMS R&A. MAPIR receives a daily batch file from the CMS R&A with a listing of providers who have submitted an application through the CMS R&A.

C.2.2 Predecessor Activity

The EP or Hospital has a Medicaid number and meets the basic eligibility criteria for provider type as defined by the Medicaid EHR Incentive Payment Program final rules. Medicare Providers and Hospitals must be in the Provider Enrollment, Chain & Ownership System (PECOS) in order to register with the CMS R&A and Hospitals must have a CMS Certification Number (CCN). Once the provider registers with the CMS R&A, the CMS R&A sends the registration to Massachusetts and the provider is contacted to let them know they can begin using MAPIR.

C.2.3 Process Result

There are two possible outcomes to the Provider Enrollment and Eligibility Verification Process:

1. The EP or Hospital meets enrollment, eligibility criteria and A/I/U or Meaningful Use criteria and all attestations are verified;

2. EP/Hospital fails to meet eligibility criteria which results in one of two outcomes:
   - EP or Hospital's application can be corrected and resubmitted for approval with assistance from MeHI/EVOT; and
   - EP or Hospital's application cannot be corrected and they are informed of the initial denial of eligibility and given the opportunity to submit a request for C.4 (Reconsideration and Provider Appeals).

C.2.4 Successor Activity

Assuming the enrollment and eligibility verification is deemed acceptable by MAPIR, MeHI/EVOT, and MassHealth, MAPIR is updated and C.3 (Payment Processing) would be the successor activity. If however, eligibility is initially denied and the Provider wishes to contest the denial, the successor activity would be C.4 (Reconsideration and Provider Appeals).

C.2.5 Business Process Description

Thorough and streamlined eligibility determination and pre-payment verification business processes are fundamental components of the Medicaid EHR Incentive Payment Program design and workflow. Provider information for the eligibility determination and pre-payment verification processes will be submitted through MAPIR. MAPIR has extensive system checks and edits built in to the system logic that will flag potential errors or issues, enabling real-time identification of potential concerns. Prior to being approved for payment, MAPIR will suspend applications with errors or issues, and these applications will be manually reviewed and enrollment staff will work with EPs and Hospitals directly to correct applications if possible.

The eligibility verification process includes the calculation of the incentive payment amount. For EPs the payment is calculated through MAPIR, for hospitals the payment is calculated through a

combined manual and electronic process based on available CMS 2552-92, CMS 2552-10 and DHCFP 403 cost report information. Per the Final Rule, eligible provider types must be specified. Massachusetts anticipates the following provider types would be able to take advantage of the Medicaid EHR Incentive Payment Program; Physicians, Nurse Practitioners, Certified Nurse Midwives, Dentists and Physician's Assistants practicing in certain PA-Led FQHC/RHCs, Acute Care Hospitals, Cancer Hospitals, Critical Access Hospitals, and Children's Hospitals.

C.2.6 Business Process Activities

The following table outlines the major activities/steps within the Provider Enrollment and Eligibility Verification business process:

Step	Description	Responsible Party
1	Provider (EP or Hospital) registers with the CMS R&A.	Provider
2	Provider selects Massachusetts and Medicaid for incentive payments.	Provider
3	MAPIR receives data from the CMS R&A via a daily batch process.	MeHI/EVOT
4	*MAPIR interfaces with MMIS and checks for Provider enrollment in Medicaid and checks that provider NPI and other information matches existing MMIS data. An exception report of providers that do not match/are not enrolled in Medicaid is produced.	MeHI/EVOT
5	If the information matches, MeHI/EVOT emails and contacts EP/Hospital a confirmation that the application has been received and provider can proceed to enter attestation information.	MeHI/EVOT
6	If the information does not match, MeHI/EVOT determines the issue (typo, unrecognized NPI, TIN, etc.)	MeHI/EVOT
7	If the issue is a typo, the application is suspended and MeHI/EVOT instructs the Provider to correct and re-enter the information in the CMS R&A.	MeHI/EVOT
8	If the issue is not a typo and not readily fixable by the Provider the application is suspended– or if the provider wishes to direct the Incentive Payment to a third-party, MeHI/EVOT & MassHealth will collaborate with the provider and attempt to process a Special Enrollment (see the Special Provider Enrollment Process below), or MeHI/EVOT and MassHealth will work together to identify the provider as an existing provider.	MeHI/EVOT & MassHealth
9	Confirmation of application receipt directs the provider to MAPIR to complete attestations and application.	MeHI/EVOT
10	Provider logs in to MAPIR and confirms that its provider information (supplied via the CMS R&A) is correct and complete: Data confirmed by EP's include (but may not be limited to): • Name;	Provider

Step	Description	Responsible Party
	• Applicant NPI; • Payee TIN/SSN; • Payee NPI; • Business Address; • Business Phone; • Incentive Program (Medicare or Medicaid); • Incentive Program State; • Eligible Professional Type; • CMS R&A Registration ID; • CMS R&A Registration E-Mail Address; and • CMS EHR Certification Number (if provided in CMS R&A). Data confirmed by Hospitals include (but may not be limited to): • Legal Business Name; • Hospital NPI; • CCN; • Hospital TIN; • Business Address; • Business Phone; • Incentive Program (Medicare/Medicaid/Both); • Incentive Program State; • CMS R&A Registration ID; • CMS R&A Registration Email Address; and • CMS EHR Certification Number (if provided in CMS R&A).	
11	Provider (EP) enter information for pre-payment verification and select appropriate answers in MAPIR for the following questions: • Provider Type; • Hospital-Based Physician; • Choose Medicaid incentive program (vs. Medicare); • Presence or absence of any pending sanctions with Medicaid or Medicare in any state; • Compliant with all HIPAA regulations; • Licensed in the state in which you practice; and • Selects the CMS certified EHR Number from Certified Health IT Product List (CHPL) on the ONC website. Provider (EP) responds to questions related to patient volume: • Predominately practice in an FQHC/RHC (50% or more of practice time); • Submitting patient volume as either an individual or group/clinic or panel; • Start date of the 90-day continuous period; • Service location(s) identifier(s) in which they practice	Provider

Step	Description	Responsible Party
	and report needy individual for providers practicing predominantly in FQHC/RHC or Medicaid/1115 waiver patient thresholds for non FQHC/RHC providers; • Enters numerator and denominator data at each site that they are reporting their Medicaid patient thresholds for needy individual FQHC/RHC or Medicaid/1115 waiver patient thresholds; and • Indicate meaningful use measures from this site. Provider (hospital) enters information for pre-payment verification* and selects appropriate answers in MAPIR for the following questions: • Choose Medicaid incentive program (vs. Medicare); • Presence or absence of any pending sanctions with Medicaid or Medicare in any state; • Compliant with all HIPAA regulations; • Licensed in the state in which you practice; and • Selects the CMS certified EHR Number from Certified Health IT Product List (CHPL) on the ONC website. * Hospital registration and attestation requirements to be determined once CMS issues additional guidance on deeming process. Provider (hospital) responds to questions related to patient volume: • Start date of 90-day consecutive period; • 90-day consecutive period it is using to establish its Medicaid patient volume of 10%; o (# of ER Medicaid/1115 Waiver visits + # of Medicaid 1115 Waiver inpatient discharge) /(total # of ER visits + total # inpatient discharges) over a 90 day period. MAPIR will automatically calculate Medicaid/1115 Waiver or Needy Patient Thresholds. A sample hospital payment calculation for Massachusetts including all appropriate data elements is included as an attachment to the SMHP (see Appendix J). Provider (Hospital) enters information for incentive payment calculation and the incentive calculation is verified and re-calculated using data obtained from the respective CMS 2552-96, 2552-10 and Massachusetts DHCFP 403 Schedule III reports: • Fiscal Year end-date information; • Total Charges; • Total Inpatient Discharges;	

Step	Description	Responsible Party
	• Total Inpatient Bed Days; • Total Medicaid Inpatient Bed Days; • Total Charges to Charity Care; and • Medicaid Share. It is calculated as: a. Estimated Medicaid inpatient-bed-days plus estimated Medicaid managed care inpatient-bed-days b. Divided by estimated total inpatient-bed-days multiplied by (estimated total charges minus charity care charges)/divided by estimated total charges Provider (EP & Hospital) selects the appropriate Adopt/Implement/Upgrade (A/I/U) phase for which they are requesting an incentive payment and planned and complete activities OR Provider (Hospital) enters MU measures being captured in their EHR and attests to its information pertaining to MU measures. Provider selects the Planned and Complete implementation and upgrade activities.	
12	Provider attests that all information has been provided truthfully and is accurate and adds electronic signature.	Provider
13	All hospital applications including incentive payment calculation and any suspended eligible professional applications are reviewed by MeHI/EVOT to determine if they can be approved. If they can, proceed to Step 14.	MeHI/EVOT
14	MeHI/EVOT conducts the Pre-Payment Verification Process.	MeHI/EVOT

Table C.2.6.1: Business Process Activities – Provider Enrollment and Eligibility Verification

Special Provider Enrollment

In instances where a provider does not match during the initial CMS R&A to MAPIR/MMIS interface a determination will be made if the provider is not enrolled as a Medicaid provider or if the provider information within MMIS cannot be easily reconciled with CMS R&A information. For some providers a special provider enrollment will need to be performed to establish the provider as eligible for Medicaid EHR Incentive Payments. In instances where billing data and MCO encounter data are not available to validate the Medicaid patient threshold information that the provider is attesting to, the state will request a report from the provider through their EHR or patient management system that shows the encounter activity for the selected 90 day period.

At this time MassHealth anticipates that a special enrollment process will need to be followed in several instances including, but not limited to:

- EP (e.g. Nurse Practitioner or Certified Nurse Midwife) is part of a Medicaid Managed Care Organization and is not enrolled as an individual Medicaid provider;
- EP is employed by a clinic and is not enrolled as an individual Medicaid provider in the MMIS provider database;

- EP is participating in the Children's Medical Security program and is not an active biller to the Medicaid program; and
- Dentists who are not enrolled as Medicaid providers in the MMIS provider database.

To complete a special enrollment and establish a provider in MMIS for purposes of receiving an EHR Incentive Payment, it is anticipated that the MeHI/EVOT and MassHealth will collaborate to work with the EP and gather the following information for the special enrollment form.

The specific data elements that will be required for the Provider Special Enrollment process are included in Appendix G (EHR Application Data Elements). The provider verification steps as described below will be followed for all appropriate data elements and the EP/Hospital's information will be updated in MAPIR.

Provider Attestation and Pre-Payment Verification

In MAPIR Providers will need to attest to the information they have provided. MeHI/EVOT and MassHealth will then need to review these attestations and information provided in MAPIR in order to determine if the provider's information has been verified for payment. The verification process will utilize existing processes that are already in place within MassHealth's overall provider enrollment, maintenance and compliance operations and manual checks of information will be performed as needed. Prepayment verification steps – specifically for the Medicaid EHR Incentive Payment Program, include:

Information to Verify	Process and Data Source for Verification	Responsibility
A/I/U Verification	Self-Attestation in combination with verification of EHR CMS certification number and paperwork uploaded into MAPIR (license copy, CIO attestation, vendor contract, etc.).	MeHI/EVOT
Business Address and Telephone Number (contact information) Contact Name	Hospital – compare information entered to license on file. EP – compare information entered to MMIS	MeHI/EVOT
Do Sanctions Exist from Medicare?	Check of CMS R&A data	Automated Interface
CCN	Check of MMIS data.	MeHI/EVOT and the MMIS Team
Hospital based provider	Verified against MMIS/Data Warehouse with a goal to verify against the All Payer Claims Database in 2012	MeHI/EVOT & DHCFP
Hospitals demonstrate ALOS < 25 days	The CMS 2552-96 and 2552-10 hospital cost reports will be the general source of validating ALOS with a goal to verify against the All Payer Claims Database in 2012.	MeHI/EVOT & DHCFP
Medicaid Enrolled	Review against MMIS data is done by MAPIR and if the match fails it may require completing a Provider Special Enrollment	MeHI/EVOT
Meaningful Use	Hospital – if deemed by Medicare, then considered eligible for Medicaid. While the state has the capacity	MeHI/EVOT

Information to Verify	Process and Data Source for Verification	Responsibility
Verified?	to do Meaningful Use auditing, the state will support CMS' Meaningful Use auditing efforts with all eligible hospitals.	
	EP – self attestation, submission of numerator, denominator and exclusion data.	
Minimum Medicaid Patient Threshold	Hospital - MMIS/Data Warehouse, DHCFP 403 report and the CMS 2552-96 and 2552-10 hospital cost reports and All Payer Claims Database when fully accessible (goal to have APCD accessible by 2012).	MeHI/EVOT coordinates with DPH and MassHealth
	EP (solo) – verified against MMIS/Data Warehouse (numerator) in 2011 with a goal to utilize the All Payer Claims Database (numerator and denominator) for verification in 2012.	
	EP in a Group – verified against MMIS/Data Warehouse (numerator) in 2011 with a goal to utilize the All Payer Claims Database (numerator and denominator) for verification in 2012.	
	EP on a Panel – Verify number of Medicaid patients on panel + MCO encounters and claims divided by total panel + total claims and encounters against MMIS/Data Warehouse (goal is to utilize APCD in 2012).	
Practices Predominantly (FQHC/RHC)	Review of MMIS and Data Warehouse data in 2011 with goal to compare against APCD in 2012.	MeHI/EVOT coordinates with MassHealth
Provider Name	Review of MMIS.	MeHI/EVOT coordinates with MassHealth
Provider Type	Review of MMIS.	MeHI/EVOT coordinates with MassHealth

Table C.2.6.2: Provider Attestation and Pre-Payment Verification Specifically for Medicaid EHR Incentive Payment Program

Massachusetts intends to follow CMS guidance on the calculation of Medicaid/1115 Waiver patient thresholds allowing EPs to submit threshold calculations at the individual provider level; group level; and patient panel level. Thus, for the purposes of calculating EP and eligible hospital patient volume, the following MassHealth/1115 Waiver eligibility categories can be included within the providers' Medicaid/1115 Waiver thresholds:

Massachusetts-MassHealth and 1115 Waiver Populations	Medicaid/1115 Waiver Populations (Needy Individual Populations=Medicaid/1115 Waiver/CHIP/Free Care/Sliding Scale)		
	EPs who do not Practice Predominately at FQHC/RHC	**Acute, CAH and Cancer Hospitals (Children's Hospitals have no threshold)**	**EPs who do Practice Predominately at FQHC/RHC**
MassHealth Standard - Premium assistance and direct medical benefits for low income families	Yes	Yes	Yes
MassHealth Breast and Cervical Cancer Treatment Program- Direct medical benefits for uninsured women under the age of 65 with breast and cervical cancer	Yes	Yes	Yes
MassHealth CommonHealth-Premium assistance and direct medical benefits for disabled individuals who are not eligible for MassHealth Standard	Yes	Yes	Yes
MassHealth Family Assistance-Premium assistance and direct medical benefits for individuals with HIV; Premium assistance and direct medical benefits for low-income children who are not eligible for MassHealth Standard. Parents may be covered by private insurance incidental to premium assistance payments made on behalf of the child. Children may be covered through the CHIP program.	Yes (EPs will need to reduce their Medicaid Threshold by an estimated % attributed to CHIP determined by EHS by Region)	Yes (Hospitals will need to reduce their Medicaid Threshold by an estimated % attributed to CHIP determined by EHS by Region)	Yes
MassHealth Basic - Premium assistance or direct medical benefits for individuals receiving state funded Emergency Assistance to Elderly, Disabled and Children (EAEDC) or are Department of Mental Health clients who are long-term or chronically unemployed.	Yes	Yes	Yes
MassHealth Essential -Premium assistance or direct medical benefits for individuals who are long-term or chronically unemployed and who are not eligible for MassHealth Basic.	Yes	Yes	Yes
MassHealth Limfited - Emergency services for individuals whose immigration status makes them ineligible for other MassHealth programs Same as MassHealth Standard	Yes	Yes	Yes
MassHealth Prenatal- Short-term outpatient prenatal care for pregnant women who have applied for standard and are awaiting eligibility approval.	Yes	Yes	Yes
MassHealth Insurance Partnership - Premium assistance payments for MassHealth members and qualified employers.	Yes	Yes	Yes
Commonwealth Care - The hallmark of Chapter 58 is the Commonwealth Care premium assistance program, which is administered by the Massachusetts' Commonwealth Connector Authority (the Connector).	Yes	Yes	Yes

Massachusetts-MassHealth and 1115 Waiver Populations	Medicaid/1115 Waiver Populations (Needy Individual Populations=Medicaid/1115 Waiver/CHIP/Free Care/Sliding Scale)		
	EPs who do not Practice Predominately at FQHC/RHC	**Acute, CAH and Cancer Hospitals (Children's Hospitals have no threshold)**	**EPs who do Practice Predominately at FQHC/RHC**
Medical Security Plan The Medical Security Plan (MSP) - provides premium assistance or direct medical benefits to individuals who are receiving unemployment compensation benefits under Massachusetts General Law Chapter 151A.	Yes	Yes	Yes
Health Safety Net- Massachusetts introduced the Health Safety Net (HSN) under Chapter 58 as a successor to the Uncompensated Care Pool.	N/A[24]	Yes	Yes
Healthy Start-The Healthy Start Program provides health insurance to low-income, uninsured pregnant women in order to improve access to early, comprehensive, and continuous prenatal care to improve the health of newborns and their mothers	Yes	Yes	Yes

Table C.2.6.3: Medicaid/1115 Waiver Populations

In instances where certain CHIP beneficiaries who participate in the MassHealth Family Assistance program and cannot be easily identified and removed the Medicaid patient threshold calculation – the state will consider developing a table listing the percentage of CHIP/MassHealth beneficiaries (by geographic area) relative to all Medicaid enrollees (by geographic area) and providers who primarily treat children can reduce its count of Medicaid patients by the appropriate percentage.

For the Medicaid EHR Incentive Payment Program, Prepayment verification steps that leverage existing processes include:

Information to Verify	Process and Data Source for Verification	Responsibility
Do Sanctions Exist in Massachusetts?	MAPIR will suspend at initial application if a provider answers "yes" to the sanctions questions. Sanctions are checked on a monthly basis as part of MassHealth provider eligibility maintenance process. Post initial Medicaid EHR Incentive Payment Program application, sanction sources are validated against current provider database; provider list is compared against exclusions and sanction.	MassHealth notifies MeHI/EVOT
Is the Provider Alive?	CMS R&A does initial check against vital statistics On an ongoing basis, Provider Compliance Unit (PCU) does a check against Social Security	MassHealth notifies MeHI/EVOT

[24] The Health Safety Net provides uncompensated care payments to hospitals and FQHC's for care provided, which can be an outpatient provider at a hospital but the only entity eligible for a payment is the hospital itself. Therefore, no EPs receive payment from the Health Safety Net.

Information to Verify	Process and Data Source for Verification	Responsibility
	Administration database as part of MassHealth provider eligibility maintenance process.	
Legal Entity Name	Name is verified at initial MassHealth enrollment and provider must supply copies of W-9 forms and licenses.	MassHealth notifies MeHI/EVOT
Licensed to Practice in Massachusetts	MAPIR will suspend at initial application if a provider answers "no" to the licensed to practice question. Hospital - Post initial Medicaid EHR Incentive Payment Program application – the Department of Public Health maintains current copies of Hospital licenses.	MeHI/EVOT coordinates with DPH and MassHealth
	EP - Post initial Medicaid EHR Incentive Payment Program application – changes in licensing are compared against provider database on an ongoing basis as part of MassHealth provider eligibility maintenance process.	
National Provider Identifier (NPI)	As part of MassHealth provider eligibility maintenance process, EPs must present proof of NPI at enrollment, NPI start and end dates can be changed in the provider table ensuring they stay current.	MassHealth notifies MeHI/EVOT
Payee Legal Entity Name	As part of MassHealth provider eligibility maintenance process, licensee name, choice to receive payment by TIN or SSN is required at enrollment and copy of W-9 is required as appropriate.	MassHealth notifies MeHI/EVOT
Payee Tax Identification Number (TIN)/Social Security Number (SSN)	As part of MassHealth provider eligibility maintenance process, a copy of an IRS letter is required at enrollment. If the TIN match fails at initial application it may require completing a Provider Special Enrollment	MassHealth notifies MeHI/EVOT

Table C.2.6.4: Provider Attestation and Pre-Payment Verification – Existing Processes

If all information and verifications result in a determination of "eligible" the provider will receive a notification (e-mail) indicating that their application is approved, and the provider can expect to receive an EHR Incentive Payment during the next regularly scheduled payment cycle.

If the application and/or resulting verification process results in finding that the EP or Hospital is not eligible, MAPIR will generate a notice (e-mail) to providers that will:

- indicate an "initial determination of not eligible,"
- describe the reason(s) why the provider did not pass the initial eligibility or verification tests,
- indicate the process for requesting reconsideration, and
- request new or additional information from the EP or hospital which must be different from that which is in the CMS R&A or MAPIR.

Providers will have 30 days to respond to the initial determination of not eligible by providing

additional information and submitting a request for reconsideration, see business process C.4 (Reconsideration and Provider Appeals). Providers that have completed the Reconsideration Process who continue to question why they are not eligible will have the option to appeal. The state will handle such appeals in accordance with state administrative procedures and existing provider appeals protocols. Appeals will be directed to Board of Hearings and tracked in MAPIR by MeHI/EVOT.

If a Hospital is deemed by Medicare that it meets Meaningful Use it will be considered eligible for Medicaid EHR Incentive Payments.

Payment Calculation

One of the final steps in Pre-Payment Verification is the calculation of the EHR Incentive Payment. For EPs the payment is calculated through MAPIR based on Medicaid patient volume thresholds met (20% or 30% for pediatricians) and what year of Medicaid EHR Incentive Payment Program participation the EP is in – Year 1 or Years 2- 6.

Medicaid EHR Incentive Payments – Eligible Professionals

Calendar Year	2011	2012	2013	2014	2015	2016
2011	$21,250					
2012	$ 8,500	$21,250				
2013	$ 8,500	$ 8,500	$21,250			
2014	$ 8,500	$ 8,500	$ 8,500	$21,250		
2015	$ 8,500	$ 8,500	$ 8,500	$ 8,500	$21,250	
2016	$ 8,500	$ 8,500	$ 8,500	$ 8,500	$ 8,500	$21,250
2017		$ 8,500	$ 8,500	$ 8,500	$ 8,500	$ 8,500
2018			$ 8,500	$ 8,500	$ 8,500	$ 8,500
2019				$ 8,500	$ 8,500	$ 8,500
2020					$ 8,500	$ 8,500
2021						$ 8,500

Table C.2.6.5: Provider Attestation and Pre-Payment Verification – Existing Processes

Note:

1. Pediatricians with a minimum 20% patient volume may qualify for up to a maximum payment of $14,167 in the first incentive payment year and to up a maximum of $5,667 in each of the 5 subsequent incentive payment years for no more than a total of $42,500 over the maximum 6-year period.
2. If a Pediatrician meets or exceeds the 30% patient volume threshold they will be eligible for the full incentive payment amounts of $21,250 in the first incentive year and $8,500 in subsequent years.

For Hospitals the payment is calculated through a combined manual and electronic process based on available CMS2552-96, CMS 2552-10, and DHCFP 403 cost report information. For purposes of the Medicaid EHR hospital incentive program, the overall EHR amount is equal to the sum over 4 years of:

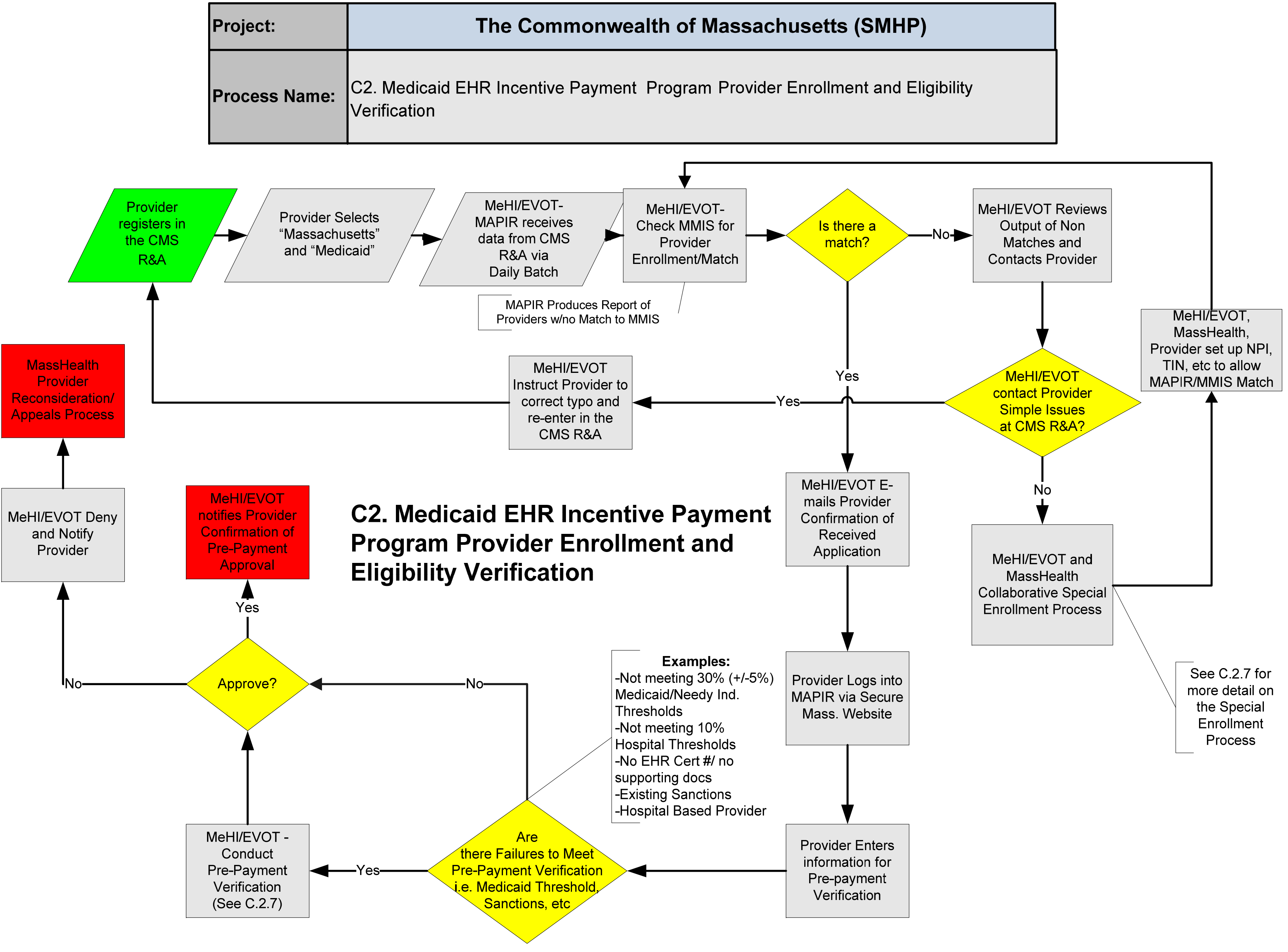
- The base amount (defined by statute as $**2,000,000**); plus
- The discharge related amount defined as **$200** for the 1,150th through the 23,000th discharge for the first year (for subsequent years, States must assume a provider's average annual growth rate (with increases and decreases in discharges) for the most recent 3 years for which data are available per year):
- Multiplied by the transition factor for each year which equals:
  - 1 in 2011
  - ¾ in 2012
  - ½ in 2013, and
  - and ¼ in 2014.
- Multiplied by the Medicaid share which is the percentage of a hospital's inpatient, non-charity care days attributable to Medicaid inpatients. It is calculated as:
  - Estimated Medicaid inpatient-bed-days plus estimated Medicaid managed care inpatient-bed-days
  - Divided by estimated total inpatient-bed-days multiplied by (estimated total charges minus charity care charges)/divided by estimated total charges

Hospitals will enter their information into MAPIR and MeHI/EVOT will verify the information entered and compare the data and re-calculate the incentive calculation using the CMS 2552-96 and the CMS 2552-10 hospital cost reports as well as the DHCFP 403 Schedule III cost reports. A sample hospital payment calculation is included in Appendix J. Unlike Medicaid EPs, who must waive rights to duplicative Medicare incentive payments, hospitals may receive incentive payments from both Medicare and Medicaid, contingent on successful demonstration of meaningful use and other requirements under both programs. The last year that a hospital may begin receiving Medicaid incentive payments is FY 2016. States must make payments over a minimum of 3 years and a maximum of 6 years. Additionally, in any given payment year, no annual Medicaid incentive payment to a hospital may exceed 50 percent of the hospital's aggregate incentive payment. Likewise, over a 2-year period, no Medicaid payment to a hospital may exceed 90 percent of the aggregate incentive. Massachusetts plans to issue the hospital payments over a period of three (3) years using the following formula:

Year 1	50% of the of the hospital's aggregate incentive payment
Year 2	30% of the of the hospital's aggregate incentive payment
Year 3	20% of the of the hospital's aggregate incentive payment

C.2.7 Business Process Workflow Diagram

The high-level business process workflow diagram for the Provider Enrollment and Eligibility Verification business process is found on the following page.


Project:
The Commonwealth of Massachusetts (SMHP)
Process Name:
C2. Medicaid EHR Incentive Payment Program Provider Enrollment and Eligibility Verification
Provider registers in the CMS R&A
Provider Selects "Massachusetts" and "Medicaid"
MeHI/EVOT-MAPIR receives data from CMS R&A via Daily Batch
MeHI/EVOT-Check MMIS for Provider Enrollment/Match
MAPIR Produces Report of Providers w/no Match to MMIS
Is there a match?
No
MeHI/EVOT Reviews Output of Non Matches and Contacts Provider
MeHI/EVOT, MassHealth, Provider set up NPI, TIN, etc to allow MAPIR/MMIS Match
MassHealth Provider Reconsideration/ Appeals Process
MeHI/EVOT Instruct Provider to correct typo and re-enter in the CMS R&A
Yes
Yes
MeHI/EVOT contact Provider Simple Issues at CMS R&A?
No
MeHI/EVOT E-mails Provider Confirmation of Received Application
MeHI/EVOT and MassHealth Collaborative Special Enrollment Process
MeHI/EVOT Deny and Notify Provider
MeHI/EVOT notifies Provider Confirmation of Pre-Payment Approval
C2. Medicaid EHR Incentive Payment Program Provider Enrollment and Eligibility Verification
Yes
Approve?
No
No
Examples:
-Not meeting 30% (+/-5%) Medicaid/Needy Ind. Thresholds
-Not meeting 10% Hospital Thresholds
-No EHR Cert #/ no supporting docs
-Existing Sanctions
-Hospital Based Provider
Provider Logs into MAPIR via Secure Mass. Website
See C.2.7 for more detail on the Special Enrollment Process
MeHI/EVOT - Conduct Pre-Payment Verification (See C.2.7)
Yes
Are there Failures to Meet Pre-Payment Verification i.e. Medicaid Threshold, Sanctions, etc
Provider Enters information for Pre-payment Verification

C.3 Payment Processing

This sub-section handles the Payment Processing Process. In this business process, the Medicaid EHR incentive payments are processed and disbursed to Eligible Professionals and Hospitals. Payment Processing includes the final pre-payment verification steps and the payment processing steps which comply with CMS requirements and result in the provider or hospital receiving the EHR incentive payment.

In this business process, the Medicaid EHR incentive payments are processed and disbursed to Eligible Professionals and Hospitals. The Payment Processing step includes the final pre-payment verification steps and the payment processing steps which comply with CMS requirements and result in the provider or hospital receiving the EHR incentive payment. Once the Medicaid EHR Incentive Payment Program incentive payments are approved for disbursement, the payment process steps are the same steps that are followed for all Medicaid provider payments. The Medicaid EHR Incentive Payment Program leverages the existing payment process and will be integrated into the current Medicaid payment cycle.

C.3.1 Trigger Event

The Payment Processing business process is initiated when MeHI/EVOT downloads from MAPIR a weekly report of applications ready for payment. At this time, the provider is notified that their application has been verified and is moving forward for payment. Once the provider is notified, the payment clock begins. MassHealth expects to be able to make the payment within 30 days of the provider receiving notification that their application has been preliminarily approved for payment. The Commonwealth will adhere to this time period but some delays may be inevitable due to factors such as timing of the state fiscal year and available cash flow.

C.3.2 Predecessor Activity

Payment Processing can begin once the pre-payment verification of eligibility and attestations is complete and the provider application is identified as “ready for payment.” At this point, the provider or hospital has completed and submitted the Medicaid EHR Incentive Payment Program application in MAPIR with an electronic signature. The provider has been registered and MeHI/EVOT determines them to be eligible and verified for Medicaid EHR incentive payments. It is important to note that the provider status is reviewed prior to generating an EHR Incentive Payment.

Thorough eligibility determination and pre-payment verification business processes are fundamental components of the Medicaid EHR Incentive Payment Program design and workflow (see Section C.2). Provider information for the eligibility determination and pre-payment verification processes will be submitted through MAPIR. MAPIR has extensive system checks and edits built in to the system logic at multiple points in the application process that will flag potential errors or issues, enabling identification of potential concerns. Prior to being approved for payment, MAPIR will suspend applications with errors or issues, and these applications will be manually reviewed. The incentive payment amount is calculated through MAPIR for Eligible Professionals and through a combined manual and electronic process for hospitals.

C.3.3 Successor Activity

Once the EHR Incentive payment has been processed through MMIS and MMARS it is sent back to MAPIR. MAPIR passes the payment information back to the CMS R&A. If a payment has been denied and the provider contests the denial, the successor activity would be business process C.4 (Reconsideration and Provider Appeals).

C.3.4 Process Result

There are four possible outcomes to this process:

1. The payment is disbursed to the provider or hospital and the payment process is complete and information is fed back to the CMS R&A;
2. The request for payment is rejected, the EP or Hospital is notified, MeHI/EVOT follows up with the provider to determine if the provider information can be corrected and resubmitted for approval. This is an opportunity for a final CMS R&A check;
   - If the provider information can be corrected, it goes back to business process C.2 (Pre-payment Verification Business Process).
   - If the provider information cannot be corrected, a final notification is issued. A workflow will be developed to notify providers if a suspended payment is more than 20 days old.
3. The request for payment is rejected, provider information cannot be corrected, and the provider or hospital is notified and does not contest the rejected payment; and
4. The request for payment is rejected, provider information cannot be corrected, and the provider or hospital is notified and contests the rejected payment. When the EP or Hospital contests the payment, they will be directed to begin the Reconsideration and Provider Appeals business process (C.4).

C.3.5 Business Process Description

In this business process, the Medicaid EHR incentive payments are approved, processed and disbursed to Eligible Professionals and Hospitals. The Payment Processing process includes the final pre-payment verification steps and the payment disbursement steps which comply with CMS requirements and result in the provider or hospital receiving the EHR incentive payment. The business process steps represented here are the same steps that are followed for all MassHealth Medicaid provider payments. The Medicaid EHR Incentive Payment Program leverages MassHealth's existing provider payment process and will be integrated into the current Medicaid payment cycle.

C.3.6 Business Process Activities

The steps required to complete the Payment Processing (C.3) business process are described in the table below. The "Timeframe" column refers to the expected duration of the step and the day in the payment cycle that the step is expected to be completed. The payment cycle begins the day the provider is notified that their application is conditionally approved for payment, subject to final verification checks. In all cases, the timeframe provided is the "worst case scenario" or the maximum duration anticipated for the step. The table shows that the Medicaid EHR Incentive Payment Program incentive payment is expected to be made within 30 days of the provider or hospital notification that the payment is preliminarily approved for disbursement, complying with CMS guidance.

Step	Description	Responsible Party	Timeframe for Completion
1	The Provider is notified via email that their application has been reviewed and is preliminarily approved for payment, subject to final pre-payment verification.	MeHI/EVOT	Day 1
2	MAPIR conducts a final daily CMS R&A check for duplicate payments, sanctions, licensure, and to confirm that the provider is living.	MAPIR	Daily
3	On a weekly basis, MeHI/EVOT downloads a report of payments ready for processing from MAPIR.	MeHI/EVOT	Day 5
4	MeHI/EVOT sends the report to the MassHealth PCU (Provider Compliance Unit).	MeHI/EVOT	Day 6
5	PCU does a final certification check to make sure that the provider is alive and a separate check for any imminent sanctions. If any are found, a hold will be put on the check until any issues can be clarified or until a determination is made that the payment must be denied.	MassHealth PCU & MeHI/EVOT	Day 8
6	If the EP or Hospital passes the final pre-payment verification checks, PCU notifies MeHI/EVOT that payments are ready for disbursement, and the process moves to Step 11.	MassHealth PCU & MeHI/EVOT	Day 9
7	If the EP or Hospital fails the final pre-payment verification checks, PCU determines whether or not the information can be corrected and notifies MeHI/EVOT of the disposition.	MassHealth PCU	+ 1 day
8	If the information can be corrected, MeHI/EVOT notifies the provider in writing that the payment is on hold pending receipt and review of additional information, and works with the provider to correct the information by returning to business process C.2 Pre-payment Verification process. Once this process is complete, C.3 Payment Processing begins again.	MeHI/EVOT	+ 3 days
9	If the information cannot be corrected, MeHI/EVOT notifies the provider in writing of the payment disposition and options to contest, and makes the necessary updates in MAPIR.	MeHI/EVOT	na
10	The provider may choose not to contest the denied payment, and the payment process ends at this point. The provider may choose to contest the denied payment, and if so, moves to Business Process C.4, Reconsideration and Appeals.	Provider	na
11	MAPIR produces a spreadsheet of payments ready for processing, MeHI/EVOT then emails the spreadsheet to MassHealth Accounting.	MeHI/EVOT	Day 10
12	MassHealth Accounting verifies spreadsheet, converts to CSV and uploads to SFED; SFED uploads payments to MMIS to create expenditure.	MassHealth Accounting	Day 14
13	Payment request processed in MMIS financial cycle.	MMIS	Day 15
14	MMIS sends payment requests to MMARS via an interface.	MMIS	Day 19
15	MMARS issues payments to providers. For providers receiving payments via EFT, the funds would be in their bank account the next business day.	MMARS	Day 20
16	MMARS passes payment information back to the MMIS.	MMARS	na
17	MMIS passes payment information back to MAPIR.	MMIS	na
18	MAPIR passes payment information back to CMS R&A through Connect Direct.	MAPIR	na

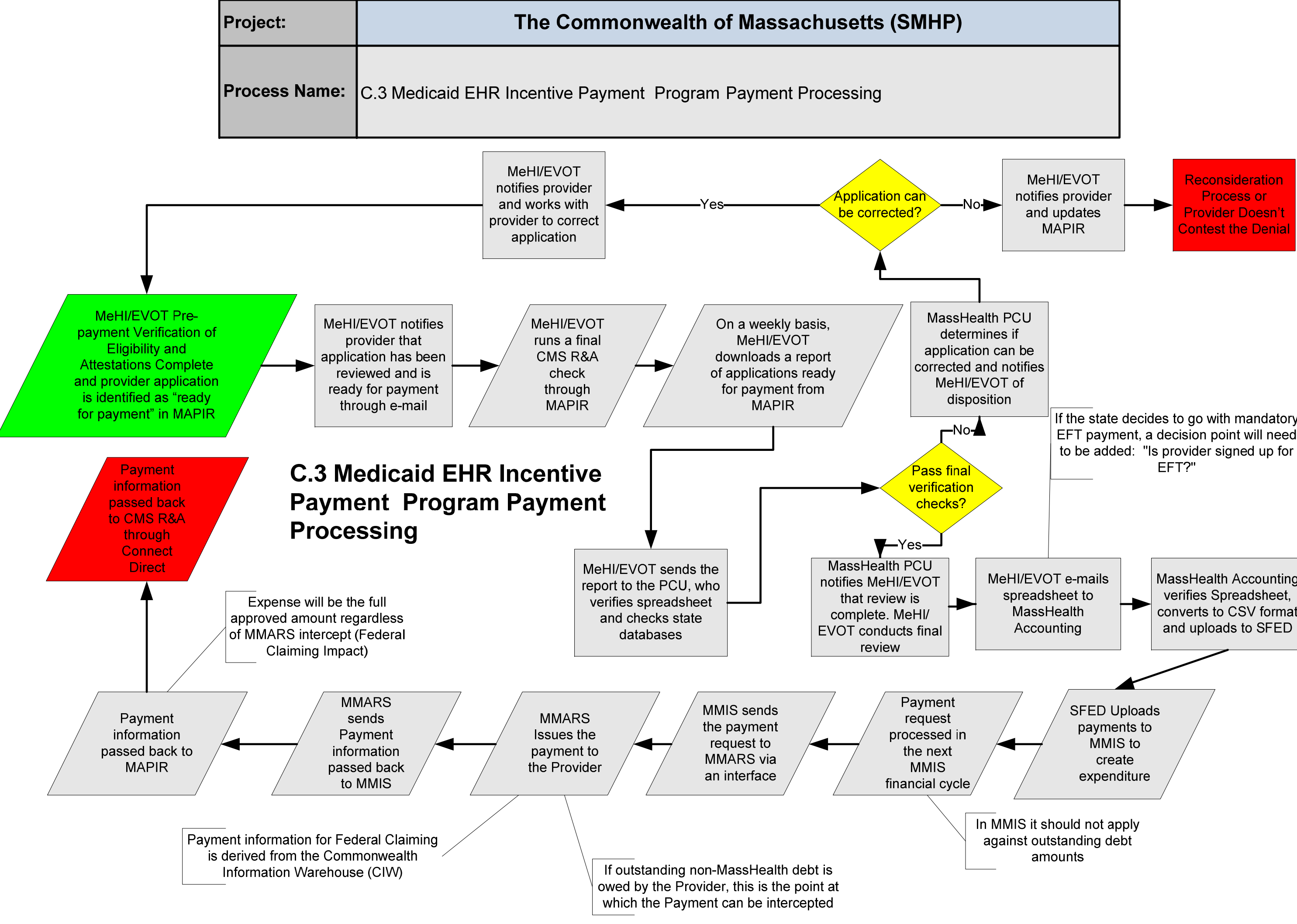
Table C.3.6: Business Process Activities (Payment Processing)

The report of providers eligible for a payment will be processed weekly and payments will be made weekly per the state MMIS payment cycle (see p. 130 step 3 in the chart). All payments will be issued within 30 days.

MassHealth is considering disbursing the incentive payments by EFT only to promote administrative efficiency. If so, all providers and hospitals would need to be signed up to receive an EFT payment. If MassHealth decides to make payments only by EFT, then an additional step would be added to the business process. This step would determine if the provider is signed up to receive an EFT payment, and if not, to contact the provider and have them complete the EFT registration process.

C.3.7 Business Process Workflow Diagram

The high-level business process workflow diagram for the Payment Processing business process (C.3) is found on the following page.


Project:
The Commonwealth of Massachusetts (SMHP)
Process Name:
C.3 Medicaid EHR Incentive Payment Program Payment Processing
MeHI/EVOT notifies provider and works with provider to correct application
Yes
Application can be corrected?
No
MeHI/EVOT notifies provider and updates MAPIR
Reconsideration Process or Provider Doesn't Contest the Denial
MeHI/EVOT Pre-payment Verification of Eligibility and Attestations Complete and provider application is identified as "ready for payment" in MAPIR
MeHI/EVOT notifies provider that application has been reviewed and is ready for payment through e-mail
MeHI/EVOT runs a final CMS R&A check through MAPIR
On a weekly basis, MeHI/EVOT downloads a report of applications ready for payment from MAPIR
MassHealth PCU determines if application can be corrected and notifies MeHI/EVOT of disposition
If the state decides to go with mandatory EFT payment, a decision point will need to be added: "Is provider signed up for EFT?"
Payment information passed back to CMS R&A through Connect Direct
C.3 Medicaid EHR Incentive Payment Program Payment Processing
No
Pass final verification checks?
Yes
MeHI/EVOT sends the report to the PCU, who verifies spreadsheet and checks state databases
MassHealth PCU notifies MeHI/EVOT that review is complete. MeHI/EVOT conducts final review
MeHI/EVOT e-mails spreadsheet to MassHealth Accounting
MassHealth Accounting verifies Spreadsheet, converts to CSV format and uploads to SFED
Expense will be the full approved amount regardless of MMARS intercept (Federal Claiming Impact)
Payment information passed back to MAPIR
MMARS sends Payment information passed back to MMIS
MMARS Issues the payment to the Provider
MMIS sends the payment request to MMARS via an interface
Payment request processed in the next MMIS financial cycle
SFED Uploads payments to MMIS to create expenditure
Payment information for Federal Claiming is derived from the Commonwealth Information Warehouse (CIW)
If outstanding non-MassHealth debt is owed by the Provider, this is the point at which the Payment can be intercepted
In MMIS it should not apply against outstanding debt amounts

C.4 Reconsideration and Provider Appeals

This section of the plan describes the process for how Providers can request reconsideration of an adverse determination made by the Commonwealth regarding their application for Medicaid EHR Incentive Payments. Providers must complete the Reconsideration Process prior to utilizing the formal Appeals process.

The Reconsideration Process will provide an opportunity for Providers who receive an *initial* adverse determination regarding an application for incentive payments, incentive payment amounts, provider eligibility determinations, demonstration of adopting, implementing or upgrading meaningful use of certified EHR technology or results of an audit to have their application re-evaluated based on information not previously submitted. A formal appeals process ("Claim for Adjudicatory Hearing") will be available if a *final* adverse determination is made after the Reconsideration Process. The Appeals process will be consistent with existing administrative and adjudicatory claims processes.

Two separate processes for review of adverse decisions exist so that when the Reconsideration Process fails to resolve the discrepancy of understanding between the Provider and the State, the formal appeals process is available in accordance with CMS regulations and Massachusetts procedures for filing a Claim for Adjudicatory Hearing.

C.4.1 Trigger Event

The Reconsideration Process:

The Provider requests Reconsideration based on an initial adverse determination related to application for the Medicaid EHR Incentive Payment Program. Specifically, a Provider may ask for reconsideration of:

- Incentive payments;
- Incentive payment amounts;
- Provider eligibility determinations;
- Demonstration of adopting, implementing or upgrading meaningful use of certified EHR technology; and
- Results of an audit.

Formal Appeals Process:

The Provider requests a Claim for Adjudicatory Hearing of an adverse final determination from Reconsideration. Providers may appeal the same denials provided for in Reconsideration:

- Incentive payments;
- Incentive payment amounts;
- Provider eligibility determinations;
- Demonstration of adopting, implementing or upgrading meaningful use of certified EHR technology; and
- Results of an audit.

C.4.2 Predecessor Activity

Reconsideration Process:

The Provider receives an initial adverse determination, and, within the timeframe set forth by the Commonwealth, pursues the Reconsideration Process.

Formal Appeals Process:

The Provider receives a final adverse determination and decides to pursue a Claim for Adjudicatory Hearing (the formal appeals process).

C.4.3 Successor Activity

Reconsideration Process:

There are three potential outcomes of the Reconsideration process:

1. The Provider no longer disputes the reason for the adverse determination and decides not to pursue a formal appeals process.
2. The Provider disputes the reason for the adverse determination of the Reconsideration Process and pursues the formal appeals process.
3. The Provider and the State resolve outstanding issues and adjusts the adverse determination.

Formal Appeals Process:

There are two potential outcomes of the formal appeals process:

1. The Provider is denied and the adverse determination is upheld.
2. The Provider is approved and the adverse determination is adjusted.

C.4.4 Process Result

Reconsideration Process:

Providers who have their adverse initial determination successfully reconsidered proceed with Medicaid EHR Incentive Payment Program activities. Providers who have their initial adverse determination unsuccessfully reconsidered can proceed to the appeals process or abandon the Reconsideration/appeals process.

Formal Appeals Process:

Providers who are successful in an appeal of final adverse determination proceed with Medicaid EHR Incentive Payment Program activities. Providers who are unsuccessful in their formal appeal of an adverse determination must comply with the findings of the Adjudicatory Hearing and formal appeals process.

C.4.5 Business Process Description

Reconsideration Process:

The Provider is notified of an initial adverse determination and asks for reconsideration. The request for reconsideration must be made within 30 calendar days of the date of an initial adverse determination notification. A provider may ask for reconsideration of:

- Incentive payments;
- Incentive payment amounts;
- Provider eligibility determinations;
- Demonstration of adopting, implementing or upgrading meaningful use of certified EHR technology; and
- Results of an audit.

The matter will be reconsidered if the request is timely and the Provider presents information that was not initially supplied during the application process. If a request for reconsideration is not timely, not made at all, or is timely but offers no new information, then the initial determination becomes the final agency action and is not reviewable through a Claim for an Adjudicatory Hearing. The provider can ask for a Superior Court review[25].

MeHI/EVOT will conduct the reconsideration. New information given by the provider will be the basis of reconsideration. As a result of completing the Reconsideration Process, MeHI/EVOT will issue a final reconsideration determination in writing and state the reasons for the determination. Final Reconsideration determinations are appealable if desired by the Provider.

Formal Appeals Process:

The CMS final rule for providing Electronic Health Record Incentive Payments provides for appeals process when providers are denied an incentive payment on one or more grounds. The final rule stipulates that providers may appeal a denial using current federal processes established in §447.253 (e) in the Code of Federal Regulations. Appeals processes established by Massachusetts will be relied upon and "… the State (may) provide any additional appeal rights that would otherwise be available under the procedures established by the State."

MeHI/EVOT will receive appropriate training by current administrative hearing staff on the specific criteria set forth in the State Adjudicatory Proceedings Act. Initial provider reconsideration responsibilities will be performed by the enrollment and verification analyst.

Formal appeals will be handled by the appeals/hearings unit within the state. If MassHealth or Board of Hearings staff needs information from the EVOT they will contact the EVOT supervisor to gather the appropriate information.

[25] Another possibility is for no Claim for an Adjudicatory Hearing and no G.L. c. 30A review because of a failure to exhaust administrative remedies.

A provider may appeal:

- Incentive payments;
- Incentive payment amounts;
- Provider eligibility determinations;
- Demonstration of adopting, implementing or upgrading meaningful use of certified EHR technology; and
- Results of an audit.

For an appeal to be initiated, a final, adverse determination must be made after reconsideration. The provider files an appeal with the Board of Hearings and with MassHealth consistent with Claims for Adjudicatory Hearings rules[26]. The appeal must be received within 30 calendar days of the notice of a final adverse determination made during reconsideration. The Board of Hearings will accept or dismiss the claim under criteria set forth in Massachusetts state law and State Adjudicatory Proceedings Act (SAPA). An opportunity for a hearing will be granted for those appeals that are accepted. A decision will be made and the parties notified.

- A provider who prevails at the appeals level will be determined eligible to apply for incentive payments, or will have all or some of the incentive payment that was applied for awarded.
- A provider who does not prevail is not eligible to receive an Medicaid EHR Incentive Payment Program, or have any greater portion of Medicaid EHR Incentive Payment Program awarded.

In either instance the provider will be notified of the disposition and the final appeal disposition will be noted in MAPIR and fed back to the CMS R&A.

C.4.6 Business Process Activities

Reconsideration Process:

Step	Description	Responsible Party
1	Provider receives initial determination decision.	MeHI/EVOT
2	Provider submits formal request for Reconsideration based upon an initial adverse determination.	Provider
3	MeHI/EVOT determines if the request is timely.	MeHI/EVOT
4	If not timely, MeHI/EVOT communicates with the Provider to notify them that the time for a Reconsideration Request has passed and no further reconsideration will be allowed. Issue final adverse determination and update results in MAPIR. If the request is timely, then MeHI/EVOT will consider additional information related to the initial adverse determination.	MeHI/EVOT and the Provider
5	Review provider information for reconsideration.	MeHI/EVOT
6	MeHI/EVOT determines if there is sufficient information included with the Request for Reconsideration.	MeHI/EVOT
7	If new information not initially provided with application is received, then determine if Reconsideration changes the initial determination.	MeHI/EVOT

[26] Governed by G.L. c. 30A, §§9, 10 and 11, Title 801 of the Code of Massachusetts Regulations, §§1.00, 1.01, 1.02 and 1.03 as modified or supplemented by Title 130 of the Code of Massachusetts Regulations, §§450.241- 450.248

Step	Description	Responsible Party
8	If NO new information is received, communicate with provider that Reconsideration process is complete, issue final adverse determination and update results in MAPIR.	MeHI/EVOT
9	If reconsideration is successful, notify provider of result and update MAPIR. If reconsideration is unsuccessful in whole or in part, or is not timely, communicate with provider that reconsideration process is complete, issue final adverse determination, and update results in MAPIR.	MeHI/EVOT
10	Provider decides whether to appeal the final adverse determination.	Provider
11	Provider either appeals or they must accept the determination.	Provider

Table C.4.6: Business Process Activities (Reconsideration)

Formal Appeals Process:

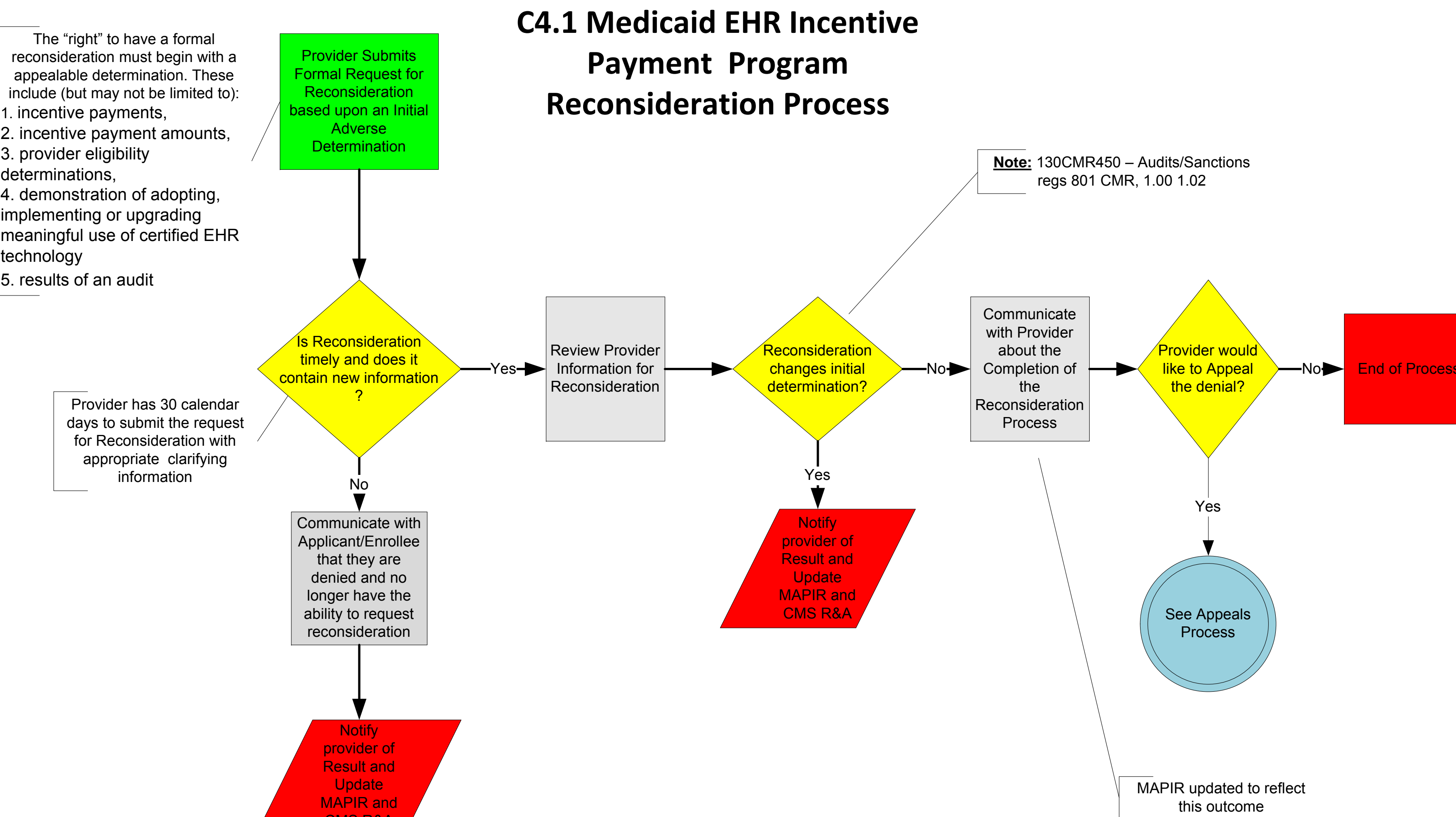
Step	Description	Responsible Party
1	Final adverse determination issued as a result of completing the Reconsideration process and the adverse determination resulted in a right to file a Claim for Adjudicatory Hearings.	MeHI/EVOT
2	Provider files a written request for a formal appeal with MassHealth within 30 calendar days of the final Reconsideration determination and must state a basis for appeal.	Provider
3	The Formal Appeal request is recorded in MAPIR.	MeHI/EVOT
4	The Board of Hearings considers the request for an Adjudicatory hearing and either approves or denies the request.	MassHealth
5	The Board of Hearings schedules and conducts a hearing.	MassHealth
6	The Board of Hearings issues a proposed decision to the Medicaid Director. The Medicaid Director can accept, modify or remand the proposed decision for further findings. The Provider and MeHI/EVOT will be notified of the appeals outcome. The outcome will be entered in MAPIR and the CMS R&A will receive the appeal outcome.	MeHI/EVOT and MassHealth

Table C.4.6: Business Process Activities (Formal Appeals Process)

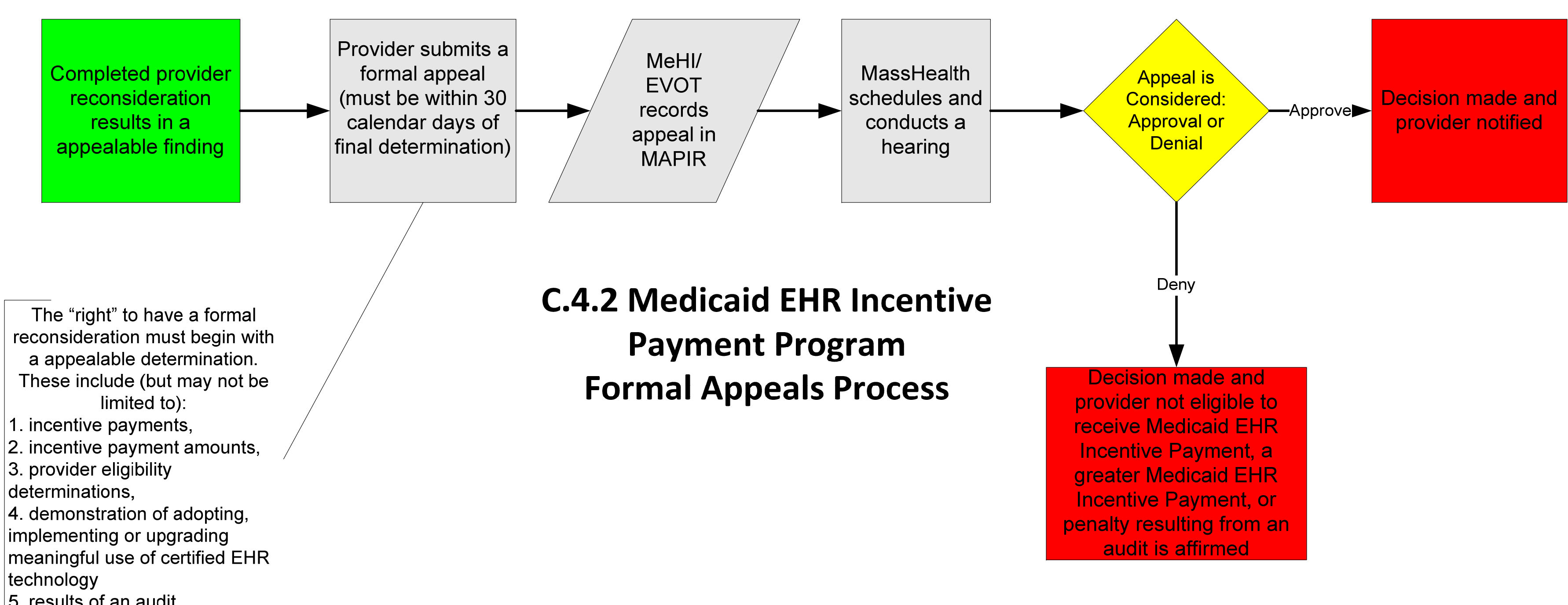
C.4.7 Business Process Workflow Diagram

The high-level business process workflow diagram for the Reconsideration (C.4.1) and formal appeals process (C.4.2) is found on the following two pages.

Project:	The Commonwealth of Massachusetts (SMHP)
Process Name:	C.4.1 Medicaid EHR Incentive Payment Program Reconsideration Process



Project:	The Commonwealth of Massachusetts (SMHP)
Process Name:	C.4.2 Medicaid EHR Incentive Payment Program Formal Appeals Process



Section D: The State's Audit Strategy

This section of the SMHP provides a description of MassHealth's methods to avoid making improper payments within the Medicaid EHR Incentive Payment Program, including program monitoring, post-payment auditing strategies, preventing and detecting fraud and abuse, federal claiming and federal reporting.

Introduction:

The Commonwealth's Medicaid EHR Incentive Payment Program Audit Strategy leverages the overall program integrity and audit strategy of the MassHealth Provider enrollment process and the Provider Compliance Unit (PCU). The strategy includes both pre- and post-payment processes to avoid making improper payments before payments are disbursed, and to detect and follow-up on improper payments after they are made. The Audit Strategy includes monitoring of both the provider payments and the Medicaid EHR Incentive Payment Program operations and management, as well as strategies to prevent and detect fraud and abuse. The Audit Strategy is designed to minimize impact on providers and State resources through integration with current provider program integrity business processes for avoiding, detecting, and following up on improper payments and fraud and abuse, and leveraging CMS audit information for Medicare providers and hospitals.

The Audit Strategy is comprised of five components, two of which are covered in previous sections of the SMHP, and three of which are discussed in detail in the sub-sections below. A summary of each component follows.

1. Provider Outreach and Provider Enrollment and Eligibility Verification;
2. Payment Processing;
3. Post-payment Provider Audit and Monitoring;
4. Program Monitoring & Oversight; and
5. Preventing and Detecting Fraud and Abuse.

The Commonwealth's approach to preventing and detecting improper payments and fraud and abuse starts before the provider begins the application process. Prevention of improper payments and fraud and abuse includes business process C.1 (Outreach and Provider Support) activities and C.2 (Pre-payment Verification).

- Outreach and Provider Support: MeHI/EVOT will provide training and technical assistance to providers to help them understand the Medicaid EHR Incentive Payment Program and execute the application process. Outreach methods will include one-on-one support, a Call Center, and a website with resource referrals, FAQs, application tips, and program information. This Business Process is detailed in Section C.1.

- Provider Enrollment and Verification: Prior to completing the Medicaid EHR Incentive Payment Program application, providers will receive a "checklist" of enrollment and eligibility requirements to guide them through the application and identify common pitfalls and errors that can lead to a rejected application or incorrect processing. MeHI/EVOT will operate a Call Center for provider inquiries and provide one-on-one technical assistance as needed during the application process. Following the provider's completion of the application, the Pre-payment Verification process involves robust and thorough manual and electronic checks (see Table D.2 in Section D.2 below) to ensure the incentive payment is made properly at the outset, according to federal regulations. Remediation of errors can occur during this business process, thus ensuring that payments are not delayed and are made properly, according to federal regulations.

MAPIR has extensive system checks and edits built in to the system logic at multiple points in the application process that will flag potential errors or issues, enabling real-time identification of potential concerns. MAPIR will suspend all applications with errors or issues, and these applications will be manually reviewed. The ability of MAPIR to suspend applications prior to approval for payment and allow providers the opportunity to modify their applications helps to prevent improper payments before the payment is authorized and disbursed. This business process is detailed in Sections C.2 and C.3.

In addition to the Medicaid EHR Incentive Payment Program pre-payment verification checks, MassHealth's provider enrollment team conducts routine checks of current or pending sanctions by Medicare or any state Medicaid program as well as state licensure for all newly enrolling and enrolled Medicaid providers (monthly checks of the List of Excluded Individuals/Entities file if already enrolled). Existing MassHealth business processes provide additional confidence that Medicaid providers who are sanctioned or do not have an active license to practice medicine in the Commonwealth, will not be able to enroll in the Medicaid EHR Incentive Payment Program because they will be identified during the "Check MMIS for Provider Enrollment/Match" step of Business Process C.2, Provider Enrollment and Eligibility Verification. Comparable verification procedures will be instituted for providers that need the special enrollment process.

1. Payment Processing (Business Process C.3)

   In the Payment Processing step, the CMS R&A and other State and federal systems are re-checked two times, through MAPIR and manual PCU checks, to ensure that providers are not receiving a Medicare payment, or a payment from another state, and are not sanctioned; and are licensed and alive, prior to receiving the EHR incentive payment. This constitutes an additional pre-payment audit step put in place to prevent improper payments.

2. Program Monitoring and Oversight (Business Process D.1)

   MassHealth will oversee MeHI/EVOT's administration of the Medicaid EHR Incentive Payment Program. Monitoring and oversight methods will include development and review of service level agreements (SLAs), on-site monitoring of MeHI/EVOT, review and approval of Medicaid EHR Incentive Payment Program policies and procedures to ensure compliance with federal regulations, review of monthly and ad-hoc operations reports, a random sampling of documentation to ensure policies and procedures are being followed, and reviewing the output of a contracted annual Independent Review of MeHI/EVOT program administration.

3. Provider Post-payment Audit and Monitoring (Business Process D.2)

   The Commonwealth proposes a multi-pronged post-payment auditing strategy that consists of ad hoc audits based on analytics and application of Risk Criteria and integration with on-going reporting and provider monitoring activities. MassHealth will work closely together to implement the post-payment audit strategy and ensure follow-up occurs when anomalies are identified. Post-payment audit activities will be integrated with on-going MassHealth PCU processes to minimize impact on providers and state staff. MassHealth will revisit the Audit Strategy after the Program Year 1 payment cycle is complete.

4. Preventing and Detecting Fraud and Abuse (Business Process D.3)

   Activities to prevent and detect fraud and abuse will occur through the Medicaid EHR Incentive Payment Program life-cycle. MassHealth will provide MeHI/EVOT with education and training on identifying fraud and abuse and how to respond. The MassHealth PCU will apply routine methods of detecting fraud and abuse among Medicaid providers receiving Medicaid EHR Incentive Payment Program. The EOHHS Legal Bureau will ensure that cases are referred to the Attorney General's Medicaid Fraud Division (MFD) when necessary. The PCU will develop corrective action plans with providers when necessary.

In sub-section D.4 (Federal Claiming and Reporting), the state describes its methodology for ensuring that no amounts greater than 90% will be claimed for administrative expenses related to the administration of the program and the methodology for verifying such information. It also describes the existing staff that is responsible for completing the CMS-37 and CMS-64 Quarterly reports and claiming 100% FFP for EHR Incentive Payments.

The list of required Quarterly and Annual reports are also included in this section along with a process of how various data maintained in the data warehouse, MAPIR and elsewhere will be used to support federal reporting. It is the state's intent to maintain all of the necessary data elements in an easily accessible table which can be used for scheduled reporting and for ad hoc queries.

The table of data elements and sources can be found in the Appendix G (EHR Application Data Elements), Appendix H (Data Elements for EP Reporting), and Appendix I (Data Elements for Hospital Reporting).

Work Performed:

In order to draft the plan to audit, develop controls for and oversee the Medicaid EHR Incentive Program, a full assessment of the Medicare and Medicaid Programs Electronic Health Record Incentive Program Final Rule 42 CFR Parts 412, 413, 422 et al.; was completed to detail the requirements of the final rule. The attached Appendix B (SMHP Requirements Crosswalk) summarizes federal requirements, assigns each requirement to a specific business process, and identifies where in the SMHP the answer to each federal requirement can be found. As a result of this review, four operational activities/business processes were identified that were essential to audit and oversee the Medicaid EHR Incentive Payment Program:

- Program Monitoring and Oversight
- Provider Post-payment Audit and Monitoring
- Preventing and Detecting Fraud and Abuse
- Federal Claiming and Reporting

Business process development work sessions were conducted with EOHHS staff in order to develop business processes descriptions and associated tables for each of these four areas. Resources needed to support the various operational activities required to administer the Medicaid EHR Incentive Payment Program were also identified during the requirements gathering process.

The following provides a summary of the key tasks that were performed as a part of defining the activities needed to administer and oversee the Medicaid EHR Incentive Program:

- Review of Final Rule to verify program requirements;
- Development of business processes and data tables;
- Assessment of current MassHealth operations that may support the program;

- Identification of potential changes to current policies;
- Identification of implementation risks based on regulatory, resource or other constraints;
- Evaluation of current and future resource needs;
- Identification of system changes necessary to support business processes; and
- Development of functional roles for MassHealth and MeHI/EVOT related to Medicaid EHR Incentive Payment Program.

Organization of this Section:

Section D (The State's Audit Strategy) of the SMHP is based on Massachusetts' assessment of the final rules governing the Medicaid EHR Incentive Program and guidance provided by CMS in subsequent templates, State Medicaid Directors letters, and other communications and documentation. The subsections of Section D (The State's Audit Strategy) describe the major business processes that will support the Medicaid EHR Incentive Payment Program's audit strategy:

Sub-Section	Contents
D.1 Program Monitoring and Oversight	Describes how MassHealth will oversee the administration of the Medicaid EHR Incentive Payment Program.
D.2 Provider Post-payment Audit and Monitoring	Describes the state's post-payment audit strategy.
D.3 Preventing and Detecting Fraud and Abuse	Describes the state's approach to preventing and detecting fraud and abuse in the Medicaid EHR Incentive Payment Program.
D.4 Federal Claiming and Reporting	Describes the state's methodology for ensuring that no amounts greater than 90% will be claimed for administrative expenses related to the administration of the program and the methodology for verifying such information.

Table D.1: Sub-Sections of Section D (The State's Audit Strategy)

D.1 Program Monitoring and Oversight

This sub-section of the plan describes how MassHealth will oversee MeHI/EVOT's administration of the Medicaid EHR Incentive Payment Program.

The purpose of the Program Monitoring and Oversight business process is to ensure that the Medicaid EHR Incentive Payment Program is being administered in compliance with federal regulations, and that there are no conflicts of interest related to MeHI/EVOT's administration of the program.

MassHealth will oversee MeHI/EVOT's administration of the Medicaid EHR Incentive Payment Program by developing and utilizing checks and balances and reviewing MeHI/EVOT's internal program controls. MassHealth's monitoring and oversight methods will include the following:

- Development and regularly scheduled review of MeHI/EVOT service level agreements (SLAs);
- On-site monitoring of MeHI/EVOT;
- Review and approval of MeHI/EVOT's Medicaid EHR Incentive Payment Program policies and procedures (up front and when changes are made) to ensure compliance with federal regulations;
- Review of monthly and ad hoc operations reports such as productivity, call center, provider application status (suspensions, rejections, etc.), activity by staff person, processing time per application, activity by IOO; and
- Random sampling of documentation to ensure MeHI/EVOT is following approved policies and procedures.
- Reviewing the results of the annual Independent Review of MeHI/EVOT program administration.

Program Monitoring and Oversight will be an on-going process and occur as regularly scheduled events, such as annual reviews, as well as ad hoc activities during the outreach and provider support, provider enrollment and eligibility verification and payment processing activities. During its monitoring and oversight of MeHI/EVOT, MassHealth will look for trends in performance and compliance, document findings and issues, and work with MeHI/EVOT in a timely manner to resolve issues and take corrective action as needed.

D.2 Provider Post-payment Audit and Monitoring

This sub-section describes the state's post-payment audit and monitoring strategy.

Post-payment auditing is a business function the MassHealth Provider Compliance Unit (PCU) performs as part of its Medicaid program integrity activities in order to ferret out fraud and abuse in the MassHealth program. The PCU focuses on the post-payment review of claims to identify claims submitted and paid improperly to a provider. Similarly, for the Medicaid EHR Incentive Payment Program, it will be the responsibility of the PCU to review requests for payment in order to find potentially improper payment requests.

It is MassHealth's experience that the vast majority of providers enrolled in the MassHealth Program operate within the confines of applicable laws and regulations and adhere to the Medicaid program requirements. Likewise, the vast majority of the claims submitted to and paid by MassHealth are done so correctly. This is due primarily to the robust pre-payment edits built into the claims processing system. MassHealth's expectation is that the same will hold true for the Medicaid EHR Incentive Payment Program. MassHealth expects that the pre-payment edits in MAPIR will serve to prevent improper payments. However, not all improperly submitted requests for payment will be caught by the pre-payment edit subsystem, and thus the need for the post-payment audit and monitoring process.

The objective of the Medicaid EHR Incentive Payment Program post-payment audit and monitoring is to provide assurance that providers who have received EHR incentive payments have received a correct payment amount. The post-payment audit process will support the pre-payment verification process to bolster the Commonwealth's efforts to prevent improper payments. The table below identifies how program eligibility requirements will be handled pre- and post-payment. MAPIR will be the repository for all Medicaid EHR Incentive Payment Program data, including the attestations and supporting data and documentation listed in the table below.

Audit Element	Pre-payment Methods (MeHI/EVOT primary, PCU, CST and secondary)	Post-payment Methods (PCU)
Adopt, Implement, Upgrade (AIU) of certified electronic heath record technology	Look behind uploaded documentation (license agreement, data use agreements, letter from CIO, receipts, contracts, purchase orders, product validation records, etc.).	Look behind provider documentation; site visit if warranted or a part of other program integrity audit activities.
Meaningful Use – EPs	Documentation and reports generated from EHR uploaded to / entered into MAPIR.	No verification will be done in Year 1, information from Data Warehouse and/or All Payer Claims Database will be used for Year 2.
Meaningful Use – Hospitals	Most hospitals will be "deemed" meaningful users by Medicare.	It is anticipated that self reported data will be verified during the annual hospital audit process with DPH supporting CMS in their auditing activities.

Audit Element	Pre-payment Methods (MeHI/EVOT primary, PCU, CST and secondary)	Post-payment Methods (PCU)
Certified EHR Technology	Review uploaded documentation (receipts, contracts, purchase orders, product validation records).	Look behind provider documentation; site visit if warranted or a part of other program integrity audit activities.
Practices Predominately	Attestation and possible check of existing data through APCD and MMIS/Data Warehouse.	Review of claims/encounter data from Data Warehouse and/or APCD.
Licensure/Medicaid provider	Part of the existing provider file maintenance process.	Check databases.
Non-sanctioned/excluded and death	Part of the existing provider file maintenance process	Check databases.
Medicaid Patient Volume	Input data, attestation and interface with MMIS/Data warehouse and/or APCD.	Review of claims/encounter data from Data Warehouse and/or APCD and hospital Medicare cost report.
Needy Individual Patient Volume	Input data, attestation and interface with MMIS/Data Warehouse and/or APCD.	Review of claims/encounter data from Data Warehouse and/or APCD and hospital Medicare cost report.
Non Hospital-based	Attestation and review of CMS R&A and existing data.	Review of claims/encounter data from Data Warehouse and/or APCD.
PAs at FQHC/RHCs that are "so led" by a PA	Review uploaded documentation regarding RHC ownership, collaborative agreement or other documentation supporting PA clinical director role for FQHC.	Look behind documentation.
No duplicated payment [Medicare, other states, or within Commonwealth (i.e., fraud)]	CMS R&A will verify.	Recheck CMS R&A and conduct targeted audit based on risk criteria (i.e., similar names at similar locations).
Payment Reassignment	Pre-payment determination of a valid NPI/TIN match in the Medicaid system.	Compare TIN selection in MAPIR to existing providers and business entities in MMIS.

Table D.2: Pre- and Post-Payment Audit Elements – 2011 (based on CMS guidance)

The MassHealth Provider Compliance Unit (PCU) is responsible for the Medicaid EHR Incentive Payment Program auditing process. The PCU serves the Medicaid program integrity functions

related to providers for MassHealth. The PCU consists of three functional areas: desk reviews which include preliminary investigations and full investigations; the recovery process; and external support. The MeHI/EVOT will support the auditing process by providing requested documentation and information to the PCU in a timely manner. In addition, if the MeHI/EVOT has concerns about a provider, they will raise these concerns directly with the PCU.

The Medicaid EHR Incentive Payment Program post-payment audit activities listed below will be integrated with on-going MassHealth PCU processes to minimize impact on providers and state staff. For example, the PCU will utilize its existing case tracking system to prepare and track case narratives for provider reviews.

The MassHealth program integrity operations are located at the MassHealth Operations Center via an Interagency Service Agreement with Commonwealth Medicine at UMass Medical School. The PCU consists of one director, three managers, two project coordinators, one nurse consultant, eight data analysts, one technical analyst and one administrative coordinator. Primarily, the PCU is divided into three sections – Recovery Projects, Case Reviews for the Acute/Ambulatory programs and Case Reviews for the Community Health programs. The PCU is led by Joan M. Senatore as director, who also serves as the MassHealth liaison with the Attorney General's Medicaid Fraud Division.

MassHealth will revisit the Audit Strategy after the Year 1 payment cycle is complete as Program Year 1 auditing activities will not involve auditing Meaningful Use. This business process will become increasingly important after the first year of program operations to ensure that post-Year 1 eligibility requirements and payments are being appropriately verified, paid and tracked based upon the providers' year of entry into the program.

The post-payment audit process occurs after payments have been made to providers. There are three ways a post-payment audit can be initiated for Eligible Professionals (EPs) and one for Hospitals, described below. Prior to Medicaid EHR Incentive Payment Program implementation, PCU will develop an audit questionnaire to capture Medicaid EHR Incentive Payment Program specific audit elements when an audit is conducted.

1. *MassHealth review of MeHI/EVOT analytics identifies "high risk" providers to be selected for ad hoc post-payment audits.*

   The MeHI/EVOT Analytics Unit and the MassHealth PCU will jointly develop Risk Criteria for identifying providers to undergo post-payment audits. A targeted sample of providers will be audited based on analytics, and algorithms can be created to identify trends and patterns and report out on the Risk Criteria defined.

   Risk Criteria may include:

   - Providers with identical quality indicators or meaningful use information reported;
   - Massachusetts-based providers who practice in more than one state;
   - Out-of-state providers who have requested their incentive payment in Massachusetts;
   - Questionable meaningful use information;
   - Absence of a payment request for meaningful use compliance 2 years after a payment for adopt, implement and upgrade;
   - Composition of provider practice;
   - Providers who look somewhat similar and could be the same provider that received multiple payment – based on name, address, location, profiles (i.e. J Smith, John Smith, J A Smith--different NPIs, but same address and same Medicaid thresholds);

- Provider address (near state border);
- Address of payment destination with high cumulative total incentive payments;
- Ratio of patient volume to number of practitioners in a practice; and
- TINS receiving the most funds annually.

2. *The need for a post-payment audit is identified through other MassHealth program and payment monitoring activities, such as review of MAPIR, MMIS and/or MMARS reports.*

   Provider incentive payments will be stored and tracked in MAPIR. MassHealth staff will regularly review reports from MAPIR that show incentive payment information by provider type, date of last payment and amount of total payments made.

3. *An opportunity arises for an Medicaid EHR Incentive Payment Program post-payment provider audit to be combined with other provider program integrity activities that involve provider review, based on PCU regular sampling of providers.*

   It is the State's intent to integrate Medicaid EHR Incentive Payment Program monitoring and post-payment provider auditing with existing PCU provider program integrity processes. If a MassHealth on-site review is scheduled for a provider who is participating in the Medicaid EHR Incentive Payment Program, the state may choose to use that site visit as an opportunity to also conduct an on-site review for the Medicaid EHR Incentive Payment Program.

4. *Post-payment audits of Eligible Hospitals – including reviews of the CMS 2552-96, 2552-10 and Massachusetts DHCFP 403 Schedule III reports - will occur as part of regularly scheduled MassHealth program integrity hospital reviews.*

   MassHealth and MeHI/EVOT will work together to develop a Medicaid EHR Incentive Payment Program audit methodology to be integrated into the current MassHealth hospital review process.

Once a participating provider is identified for a post-payment audit, the PCU will take the following steps, consistent with current PCU processes and procedures:

1. Notify providers they are being audited.

2. Conduct a desk review of the payment made to the provider. The review will include (but not be limited to):
   a. Verify provider eligibility information,
      - Look behind all attestations in MAPIR.
      - Request additional documentation from providers as needed.
   b. Re-calculate payment amount.
   c. Verify payment was made to an authorized party.
   d. Verify provider (EP) did not receive a payment from Medicare or another state.
   e. Conduct site visit if warranted for additional follow-up or combine with other program integrity activities.

3. Complete Medicaid EHR Incentive Payment Program audit questionnaire including but not limited confirming that provider is using the EHR system that was identified as the certified system in MAPIR, ability to produce or show reports used for Meaningful Use Attestations, etc.

4. If an improper payment or an incident of fraud or abuse is identified, the PCU will conduct a full investigation following existing PCU processes and according to federal

regulations. The full investigation includes follow-up communications with providers to determine the nature of the payment error (i.e., provider documentation mistake, fraud or abuse), and determine appropriate next steps, such as: corrective action plan, referral to the Medicaid Fraud Division (MFD), need for recoupment, program disenrollment, and/or reconsideration and appeals process. The State will leverage existing business processes to recoup and report improper payments. CMS reporting will be adjusted as needed to correct the FFP amount. MAPIR will maintain a record of all provider payments and identify those that result in overpayments.

The State's auditable data sources include:

- Medicare cost report data, MMIS data, hospital financial statements, and accounting records;
- MAPIR data;
- MMARS (state financial system) data;
- APCD (beginning in 2011); and
- Existing Data Warehouse(s).

Both MeHI/EVOT and MassHealth staff will be authorized users of MAPIR, and thus will have the ability to directly check MAPIR for the data and documentation described in the table above.

D.3 Preventing and Detecting Fraud and Abuse

This sub-section describes the state's approach to preventing and detecting fraud/abuse in the Medicaid EHR Incentive Payment Program.

The Fraud and Abuse Prevention and Detection business process occurs throughout the Medicaid EHR Incentive Payment Program lifecycle. It consists of PCU and MeHI/EVOT activities to avoid and detect improper payments (as described above through the pre-payment verification and post-payment audit processes) and to ensure compliance with all federal regulations that pertain to the Medicaid EHR Incentive Payment Program specifically and federal and state efforts to curb fraud, waste and abuse in general. Like the other Medicaid EHR Incentive Payment Program integrity activities described above, fraud and abuse prevention and detection activities will reside in and be integrated with existing PCU business functions and processes that already address federal laws and regulations designed to prevent fraud, waste and abuse. MassHealth will provide MeHI/EVOT with education and training on identifying fraud and abuse and how to respond to suspected cases.

The core function of the PCU is to prevent and detect provider fraud and abuse in the MassHealth Program. This function is achieved through the post-payment review of claims. Fraud and abuse is defined by federal regulation and can be found at 42 CFR 455.2. Fraud is defined as an intentional deception or misrepresentation made by a person with the knowledge that the deception could result in some unauthorized benefit to himself or some other person. It includes any act that constitutes fraud under applicable Federal or State law.

Abuse is defined as provider practices that are inconsistent with sound fiscal, business or medical practices and result in an unnecessary cost to the MassHealth program, or in reimbursement for services that are not medically necessary or that fail to meet professionally recognized standards for health care. The definitions of “fraud” and “abuse” are analytically distinct, although the same provider submitting the same claim may engage in both.

Fraud focuses on the state of mind of the provider submitting the claim; that is, did the provider have the intention to deceive or misrepresent, with knowledge that the deception could result in an unauthorized benefit. Fraud detection and prevention activities focus on providers with bad intent; the goal is to prevent such providers from participating in the MassHealth program, and to deter them from fraudulent conduct by detection, investigation and prosecution. By definition, data analysis alone cannot identify fraud. At most, data analysis can detect a pattern of aberrance, which may be indicative of fraud, but only an extensive investigation can confirm or deny the actual existence of fraud. Such investigations are not within the purview of the PCU. When a pattern of aberrance is found among claims paid to a provider, the proper course of action is to refer the provider to the Attorney General's Medicaid Fraud Division for investigation. The Medicaid Fraud Division works to prevent and, if necessary, to prosecute fraud. The Division has a significant deterrent impact on fraudulent practices within the MassHealth program, such as false billing practices. The Division has the authority to execute search warrants and administrative document requests, negotiate settlements, obtain judgments and convictions, and recover criminal and civil restitution, fines, penalties, and costs.

Abuse focuses on the effect on the MassHealth program, not on the state of mind of the provider submitting the claim. A provider may have the best intentions, but if they fail to provide the services that meet “professionally recognized standard”, or provide services that are medically unnecessary or inconsistent with sound practices, or result in unnecessary cost, the PCU has an obligation to take action involving that provider. Such actions cover a wide spectrum including but not limited to referrals to the Program Review Unit for clinical review, desk reviews of medical records, referrals to other state agencies such as state licensing boards

and the Office of the Attorney General, provider education, monetary recovery, on site audits, and ongoing monitoring.

If a case of potential fraud or abuse is detected, cases will be handled like all other potential fraud and abuse cases in the MassHealth program. The Provider Compliance Unit or its designee will conduct an initial investigation. Depending on the nature of the particular fraud or abuse suspected, MassHealth may take one of the following steps:

- A corrective action plan will be developed and implemented;
- Referral to Medicaid Fraud Division within the Office of the Attorney General;
- A provider may be dis-enrolled from the program and disqualified for future participation;
- Payments will be recovered; and/or
- Other corrective actions may be implemented, as appropriate.

All suspected fraud and abuse cases will be referred to the Medicaid Fraud Division. If fraud is confirmed, the case is reported to the Office of the Inspector General.

Recoupment

Once the Provider Compliance Unit (PCU) has made a determination to recover an improper payment made to a participating provider, the recovery process outlined below is followed. This is the same recovery process that is followed for all improper Medicaid provider payments and is thus integrated into the regular PCU and Accounting workflows.

<u>For Active Billing Providers</u>

1. PCU completes an Accounts Receivable (AR) form.
2. The AR Request Form is sent to MassHealth Accounting for processing.
3. MassHealth Accounting enters, reviews, and approves the AR transaction in MMIS.
4. The recovery (off-set) will occur based on the information provided on the AR Request Form, including provider, total amount, percentage or dollar amount per cycle, effective (start) date, etc.
5. MassHealth Accounting reports the AR recoveries to the Federal Revenue Claiming Unit for adjustment to the CMS-64.

<u>For Inactive or Non-billing Providers (includes “special enrollment” providers)</u>

1. PCU receives a check from the provider.
2. PCU completes a check transmittal form and sends transmittal and check to MassHealth Accounting.
3. MassHealth Accounting processes and deposits the check.
4. MassHealth Accounting reports cash collections to the Federal Revenue Claiming Unit for adjustment to the CMS64.

Special Notes for the Medicaid EHR Incentive Payment Program:

- As the central repository of payment information for the Medicaid EHR Incentive Payment Program, recovery information needs to be passed back to MAPIR and attached to the provider’s record.
- MAPIR does not currently have a specific capability for this action, so this may be accomplished with a manual note.

D.4 Federal Claiming and Reporting

This sub-section describes the process by which Federal Claiming and reporting on the Medicaid EHR Incentive Payment Program will be done. It defines the process for ensuring no more than 100% FFP is claimed for reimbursement of incentive payments made to providers, and that no more than 90% of FFP is claimed for the administrative costs of administering the program. These processes will leverage existing processes followed for claiming FFP for Medicaid expenditures and will leverage existing federal reporting processes.

D.4.1 Federal Claiming

Massachusetts' Executive Office of Health and Human Services Federal Revenue Claiming Unit staff will be responsible for all Federal Claiming activities related to the Medicaid EHR Incentive Payment Program. This staff is presently responsible for filing quarterly CMS-64 (Medicaid Quarterly Expense Report) and CMS-37 (Medicaid Quarterly Budget Report) claims on behalf of the Commonwealth and all payments and claims related to the Medicaid EHR Incentive Payment Program will be drawn from existing data sources such as MMARS, MMIS and EOHHS staff allocation charges. In addition to the transaction history maintained in MMIS, EHR Incentive payments history will also be maintained in MAPIR.

Incentive payment expenditures will be made by the state to eligible EPs and Hospitals using only appropriate fund sources per Medicaid requirements. After payments have been issued, 100% FFP will be claimed via the CMS-64. The Federal Revenue Claiming Unit staff has a defined process for developing the CMS-64 report of <u>all</u> Medicaid expenditures and verification of data input and calculations are done at various points in the process. This team will follow existing quality control measures to ensure that no more than 100% FFP is claimed for any EHR Incentive Payment.

The process for claiming 90% FFP for allowable administrative expenses follows the same robust quality control measures. Expenditures related to the Medicaid EHR Incentive Payment Program planning and administration will be gleaned from the state's accounting and staff payroll systems and reported on the appropriate line on the CMS-64.

24a – Planning (state costs)

24b – Planning (contractor costs)

24c – Implementation and Administration (state costs)

24d – Implementation and Administration (contractor costs)

For each type of expense (Incentive Payments and Administrative Expense) the Federal Revenue Claiming Unit staff will generate a report of all allowable expenditures on a quarterly basis. Expenditures will be tracked at the subaccount level within MMARS and aggregated on a quarterly basis for federal claiming purposes. The structure of the accounting system and identification of allowable expenditures at the subaccount level will support the appropriate claiming of expenditures to this program and will eliminate the risk of mixing enhanced MMIS FFP with this FFP. The recoupment process is being further defined for the incentive payment program and will leverage existing systems, policies, and procedures, where possible. As with any quarterly claim, the CMS-64 and supporting documentation will be reviewed for accuracy prior to submission.

During the first phase of implementation the state will develop an estimate of program expenses for the CMS-37 report based on potential EPs and Hospitals who may qualify within the first year. As EHR Incentive Payments are made and the program becomes more mature, the

Federal Revenue Claiming Unit staff will use actual payment levels to develop the quarterly estimate for the CMS-37. The CMS-37 and supporting documentation will be reviewed for accuracy prior to submission.

D.4.2. Federal Reporting

MassHealth staff will be responsible for filing Quarterly and Annual Reports on Medicaid EHR Incentive Payment Program progress. The table below displays the components of the federally required Quarterly and Annual reports as specified in the Final Rule.

Report Topic	Source	Frequency
Progress Report on specific implementation activities and oversight activities	MeHI/EVOT + MassHealth	Quarterly
Progress in implementing the State's approved Medicaid HIT plan	MeHI/EVOT + MassHealth	Quarterly
Provider A/I/U of Certified EHR Activities	MAPIR	Annual
Provider Incentive Payments	MAPIR + MMIS	Annual
Aggregated, de-identified Meaningful Use Data	MAPIR	Annual
Number, Type and Practice Locations of Providers who qualified for a Payment on the basis of A/I/U of certified EHR technology	MAPIR	Annual
Aggregated Data Tables representing provider adoption, implementation, or upgrade of certified EHR technology	MAPIR	Annual
Number, Type and Practice Locations of Providers who qualified for a Payment on the basis demonstrating they are Meaningful Users of certified EHR technology	MAPIR	Annual
Aggregated Data Tables representing the provider's clinical quality measures data	MAPIR	Annual
A description of quantitative data on how the Incentive Payment Program addressed individuals with unique needs such as children	MMIS/Data Warehouse + MU data/reports from MAPIR	Annual
A report on Medicaid EHR Incentive Payment Program Operations including Call Center statistics, application status (approved, denied, suspended, etc), reconsiderations requested, etc	MAPIR, + Phone systems at the Call Center	Quarterly or Annual
A report on total % of Eligible Medicaid Providers who received a payment, by MU/AIU, by Payment Year, by Provider Type, by Location	MAPIR + MMIS Provider Table and Data Warehouse	Annual

Table D.4.2: Components of the Federally required Quarterly and Annual reports as specified in the Final Rule

Section E: The State's HIT Roadmap

This section of the SMHP provides a roadmap that includes two major components; MassHealth's Operational Plan for implementing the Medicaid EHR Incentive Payment Program in its first year, and the Five-Year Strategic Plan that identifies the major IT projects required to achieve its vision of the future. This section also contains information on the additional staff resources required to implement and administer the Medicaid EHR Incentive Payment Program.

Massachusetts is fortunate to have both the support of state law (Chapter 305) and funding from both state and federal sources to assist in achieving its Medicaid HIT vision. More importantly, the Commonwealth has significant public and private HIT/HIE assets in place. Chapter 305 has mandated that all providers demonstrate competency in the use of EHR systems by January 1, 2015. Massachusetts is a national leader in EHR adoption, at about 40%[27] state-wide. As described in Section A (The State's "As-Is" HIT Landscape) of this Plan, the Commonwealth has several operational HIEs throughout the state, and is making considerable progress in expanding broadband access to the more rural parts of the state, which will enable all providers to connect to a state-wide HIE as a "network of networks." In addition, Massachusetts is a national leader in healthcare reform, with the implementation of an individual mandate for health insurance, and an expansion of its Medicaid program through a Section 1115 waiver, which expands coverage to families at up to 300% of the Federal Poverty Level.

While the Commonwealth has made important progress in EHR adoption and planning for the development of a statewide Health Information Exchange, the statewide HIT environment remains a work in progress. Massachusetts believes that widespread adoption of EHRs and expanded use of Health IT will allow providers to not only deliver patient centered health care but will also lead to improvements in the quality of care provided to all Massachusetts residents while simultaneously containing the growth of healthcare costs. This Roadmap takes the vision, goals and objectives set forth in Section B (The State's "To-Be" Landscape), identifies specific strategic projects and associates target benchmarks for measuring progress toward the achievement of goals, with the end result expected to be progress toward the state's vision over a five-year period.

Work Performed:

The State's HIT Roadmap is the culmination of the work undertaken by the Commonwealth to document the operational activities required to support the Medicaid EHR Incentive Payment Program in year one (2011), and the IT projects required in order to achieve the desired 5-year SMHP vision for MassHealth and EOHHS. Therefore, the core content of the Roadmap Section has been built upon the content and decisions made within Sections A, B, C and D of this Plan.

The major activities undertaken to complete the Roadmap included internal and external meetings to develop the Roadmap framework, planning sessions to identify SMHP HIT projects, and brainstorming sessions regarding resource requirements and preliminary benchmarks. Meetings within EOHHS and the SMHP Executive Team were held to develop and validate the Roadmap approach, and review draft sections of the Roadmap. These meetings were essential to establishment of the framework for drafting the Roadmap and developing the buy-in of the individuals who will be responsible for implementing and carrying out SMHP activities.

[27] http://assets1.csc.com/health_services/downloads/CSC_Adoption_of_EHR_Capabilities_in_Massachusetts_Physician_Practices.pdf, Page 2, paragraph 4.

Several entities within EOHHS, including the CIO's office, MeHI and the Department of Public Health, met to define the 14 HIT projects presented in the SMHP, and to develop planning and implementation timelines for each project. Internal EOHHS work sessions were conducted to identify the operational SMHP tasks (Year 1) and MassHealth and MeHI/EVOT resource requirements necessary to implement and operationalize the Medicaid EHR Incentive Payment Program.

Following is an abbreviated list of the key tasks and activities that were performed as a part of defining the state's Roadmap:

- Meetings with EOHHS including MassHealth, MeHI and the Department of Public Health to understand current and planned HIT/HIE projects and their timelines;
- Review of documentation from EOHHS and other partners regarding current HIT initiatives and plans;
- Assessment of current MassHealth operations that will support the Medicaid EHR Incentive Payment Program in the future;
- Meeting with the SMHP Executive Team to validate the Roadmap approach; and,
- Evaluation of current and future resource needs.

Organization of this Section:

The State's Roadmap of the SMHP contains two major sections:

Sub-Sections of Section E (The State's HIT Roadmap)	
Sub-Section	**Contents**
E.1 Operational Plan for 2011	This section describes MassHealth's Operational Plan for implementing the Medicaid EHR Incentive Payment Program, which includes those activities MassHealth will take in the short-term in order to begin making incentive payments to providers as planned by late summer of 2011. This section also contains information on the additional staff resources required to implement and administer the Medicaid EHR Incentive Payment Program.
E.2 Five-Year Strategic Plan	The Five-Year Strategic Plan details the specific projects that EOHHS will implement to achieve its long-term HIT/HIE goals. The Commonwealth has outlined benchmarks that relate to Medicaid EHR Incentive Payment Program provider participation. The Five-Year Strategic Plan also addresses the additional Roadmap requirements set forth in the CMS template.

Table E.0.1: Sub-Sections of Section E (The State's HIT Roadmap)

E.1 Operational Plan for 2011

This section describes MassHealth's Operational Plan for implementing the Medicaid EHR Incentive Payment Program, which includes those activities MassHealth will undertake in the short-term in order to begin making incentive payments to providers as planned by late summer of 2011. This section also contains information on the additional staff resources required to implement and administer the Medicaid EHR Incentive Payment Program.

E.1.1 Key Tasks and Activities for 2011

The State's Medicaid EHR Incentive Payment Program team must undertake numerous tasks in several key areas in order to be ready to begin making incentive payments to providers as planned by August 2011. These planning and pre-implementation activities that MassHealth will be undertaking to make the incentive payments to its providers, including promulgation of regulations, are listed in the table below. The steps to disburse the payments to the providers are described in Section C (Activities Necessary to Administer the Incentive Program). With the completion of these planning and pre-implementation tasks, the state will meet the program launch criteria as listed on page 8 of CMS State Medicaid Director Letter #10-016, "Federal Funding for Medicaid HIT Activities" issued on August 17, 2010, necessary to begin receiving the 100 percent FFP provider incentive funding.

The following table identifies the major tasks and activities MassHealth and other partners such as MeHI/EVOT must implement through the end of calendar year 2011 in order to launch the Medicaid EHR Incentive Payment Program. The table is organized sequentially, first by Start Date then by Finish Date. The "Task Category" column identifies the primary area of activity associated with the task.

ID	Task Category	Task Description	Start Date	Finish Date
1	Project Management	Finalize Operations Plan.	Began 2010	March
2	Technology	MAPIR Core System Implementation – Release A	Began 2010	April
3	Project Management	Develop budget request for approval by State legislature.	January	January
4	Technology	Develop NewMMIS change requests and submit to HP.	January	February
5	Technology	Approve HP cost estimates for NewMMIS change requests.	January	February
6	Technology	Develop business requirements for MAPIR customizations.	January	February
7	Technology	Approve HP cost estimates for MAPIR customizations.	January	February
8	Technology	Approve MAPIR technical design specifications.	January	February
9	Business Processes	Develop "special provider enrollment process;" identify system changes necessary to implement.	January	February
10	Technology	MAPIR Core Product Testing	January	March
11	Technology	Claims Relay Services Analysis and Design Project	January	June
12	Communications	Convene Communication Task Force and define communication approval process	February	February

ID	Task Category	Task Description	Start Date	Finish Date
13	Project Management	Submit Draft SMHP for CMS Review	February	February
14	Project Management	Develop and submit I-APD for CMS Approval	February	March
15	Communications	Phase 1 Provider Communications Activities: Initiate initial Communication Strategies (e.g., set up EHR Incentive Program URL in February, continue to hold provider outreach meetings, develop fact sheets and check lists etc.) updating providers on Incentive Program planning activities, basic requirements and anticipated launch date	February	April
16	Resources	Finalize job descriptions for new Medicaid EHR Incentive Payment Program Enrollment positions.	February	April
17	Technology	Build a data repository (in MAPIR, the DW or both) to maintain data on the Medicaid EHR Incentive Payment Program for verification and reporting.	February	July
18	Project Management	Submit Final SMHP for CMS Review	March	March
19	Business Processes	Develop Medicaid EHR Incentive Payment Program operational processes and procedures including special enrollment process and provider registration guide	March	May
20	Training	Develop Medicaid EHR Incentive Payment Program staff training plan for each unit (MassHealth and MeHI/EVOT).	March	June
21	Regulations	Develop and finalize Regulations, Policy, Bulletins or other Program Guidance and issue to all stakeholders	March	July
22	Communications	Phase 2 Implement Marketing and Communication Strategies Activities: Wizard, co-branding, single point of provider entry strategy, etc.	March	July
23	Regulations	Draft and promulgate regulations detailing eligibility to participate in the Medicaid EHR Incentive Payment Program, how payment is calculated, when payments are made and the appeals process.	March	July
24	Communications	Phase 3 Implement and launch Provider Marketing, Communication and Outreach Activities including outreach to high volume providers	April	Ongoing
25	Project Management	Refine program benchmarks and develop data collection strategy.	April	Ongoing
26	Resources	Obtain approval for hiring new resources based on SMHP and I-APD CMS Approval	April	April
27	Resources	Hire new Medicaid EHR Incentive Payment Program Staff	April	July
28	Technology	Implementation State specific MAPIR customizations, MMIS change orders and finalize data table development supporting patient threshold and hospital payment verification	April	July
29	Business Processes	PCU: Post-payment audit strategy is finalized, including establishment of Risk Criteria.	April	July
30	Business Processes	Develop the Provider Reconsideration Process based upon agreed upon policies.	April	July
31	Training	Deliver EHP-IP Program Staff training.	May	Ongoing
32	Technology	MAPIR Core System Release B	May	May

ID	Task Category	Task Description	Start Date	Finish Date
33	Business Processes	PCU: Create a Medicaid EHR Incentive Payment Program audit questionnaire to capture specific audit elements when an audit is conducted.	May	July
34	Communications	Reach out to providers to encourage NPI and TIN registration and Medicaid enrollment.	May	August
35	Reporting	Develop Medicaid EHR Incentive Payment Program Operational Reports	May	September
36	Project Management	Planning and development of Core MAPIR Product and State specific customizations Version 2	July	Ongoing
37	Project Management	Submit updated Launch Criteria to CMS	July	August
38	Project Management	Develop approach to collecting MU Clinical Quality Measures electronically	July	December
39	Project Management	Obtain CMS approval to initiate payments and release Medicaid EHR Incentive Payment Program funds.	July	August
40	Project Management	Launch Medicaid EHR Incentive Payment Program including beginning to make payments to Providers	August	Ongoing
41	Project Management	Prepare CMS Quarterly Reports	August	Ongoing
42	Project Management	Ongoing reporting, measurement, and evaluation of Program Performance (operational, actual vs. benchmarks, Provider Surveys, etc.)	August	Ongoing
43	Project Management	Evaluation and Medicaid EHR Incentive Payment Program planning based on changes to CMS rules and regulations related to the Incentive Program and Stage 2 MU Criteria	August (TBD)	Ongoing

Table E.1.1: High-Level Tasks and Activities for Year One

E.1.2 Resource Requirements

The following draft diagram depicts the functional areas within MassHealth and MeHI/EVOT that will require existing and new staff resources in order to successfully implement and operationally support the Medicaid EHR Incentive Payment Program.

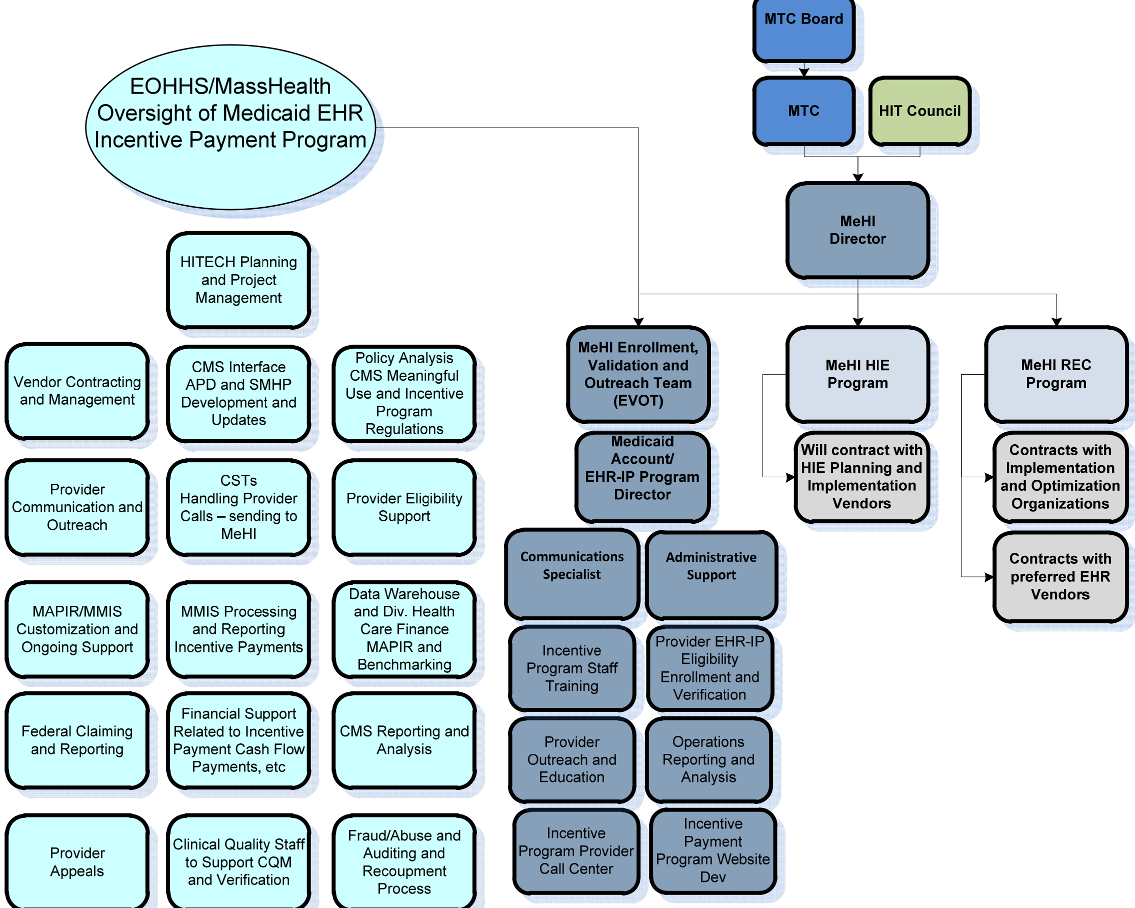


Diagram E.1.2: MassHealth and MeHI/EVOT Functional Areas

In the course of developing the HIT I-APD, EOHHS will be proposing Medicaid EHR Incentive Payment Program staffing models that will support the program's implementation activities as well as ongoing operations and oversight of the program. A preliminary staffing model for the MeHI Enrollment, Validation and Outreach Team (EVOT) may include the following:

- 1 FTE Program Director
- 1 FTE Communication Specialist
- 1 FTEs Administrative Support
- 6 FTEs Provider Enrollment and Verification Analysts
- 1 FTE Operational Reporting Analyst
- 2 FTEs Provider Outreach/Communication Coordinators
- 1 FTE Staff Training/Policy and Procedures
- 2 FTEs Call Center Support

EOHHS will also propose a staffing model for EOHHS and MassHealth in its HIT I-APD to support the implementation and ongoing administration and oversight of the Medicaid EHR Incentive Payment Program. The EOHHS and MassHealth staffing model will identify new as well as existing staff that would support the functional areas identified in Diagram E.1.2.

E.2 Five-Year Strategic Plan

The Five-Year Strategic Plan details the specific projects that EOHHS will implement to achieve its long-term HIT/HIE goals. The Commonwealth has outlined benchmarks that relate to Medicaid EHR Incentive Payment Program provider participation. The Five-Year Strategic Plan also addresses the additional Roadmap requirements set forth in the CMS template.

The state's Five-Year strategic plan describes the approach and projects, or tactical steps, to achieve the state's long-term Medicaid vision for HIT/HIE and meeting the four goals and fifteen objectives developed by the MassHealth Executive Team during the visioning process. It also includes the benchmarks to measure progress toward the stated goals.

MassHealth's approach to the Five-Year strategic plan is based on the following key principles:

- Leverage existing HIT and HIE strategic planning efforts in the Commonwealth.
- Leverage state-wide, inter-agency and public-private partnerships and collaboration.
- Leverage existing and planned resources, projects, technology and infrastructure.
- Execute key strategic EOHHS technology projects to facilitate state-wide HIE and provider adoption of EHR and achievement of meaningful use, which are the core components of the state's future vision and four goals and fifteen objectives.
- Support the implementation of MassHealth's strategic non-HIT projects and coordinating with other strategic healthcare delivery projects in the state.
- The goals and objectives stated in the SMHP originated from the State-wide HIT Plan. The Roadmap describes how those goals and objectives become Medicaid-specific through the projects and benchmarks described in the following sections.

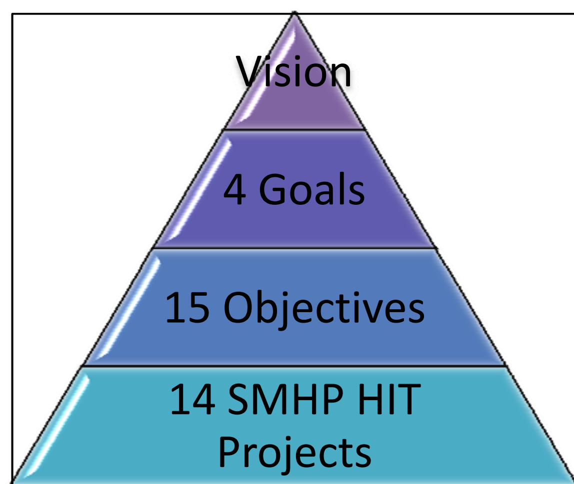


Diagram E.2: Relationship between Projects and Vision

The state's Roadmap is a pathway paved with 14 strategic EOHHS HIT projects to move MassHealth from the current HIT environment toward its proposed five-year HIT/HIE vision. The 14 EOHHS projects directly support the four HIT goals adopted by the SMHP Executive Team. The diagram at the left illustrates the relationship between the projects described later in this section to MassHealth's SMHP vision. Each segment of the pyramid is described in detail in the following sections.

E.2.1 Narrative Pathway

E.2.1.1 Current Environment

The SMHP vision, goals and objectives, and the projects selected to achieve the SMHP goals and vision, are based upon an analysis of the strengths, opportunities and weaknesses of the current HIT environment. The Current Medicaid HIT Environment is described in detail in Section A (The State's "As-Is" HIT Landscape), and provides the starting point for the Roadmap and the state's journey to the five-year vision for HIT. The strengths and challenges of the current HIT environment include:

Strengths of the Current HIT Environment

- Massachusetts has strong state political investment and commitment in HIT, as indicated by the passage of Chapter 305 in 2008, which mandates that all providers have interoperable EHRs in place no later than January 1, 2015.
- Massachusetts is a national leader in EHR adoption, at about 40% state-wide[28].
- A strong public-private partnership, the HIT Council, is in place to support the full implementation of the state-wide HIE and the proliferation of EHRs throughout the Commonwealth.
- Multiple community and regional HIEs exist in the Commonwealth that are the components for creating a "network of networks" for a state-wide HIE.
- In 2009, MassHealth implemented a new Medicaid Management Information System, referred as the newMMIS, which provides an updated foundation to help EOHHS and MassHealth more effectively establish an IT architecture and related strategies to build and implement necessary health information technologies that support the goals and objectives for improved healthcare delivery in the Commonwealth.
- The MassBroadband123 initiative is expanding high-speed Internet access in the western part of the state within the next three years, enabling providers in less populated parts of the State to connect to a state-wide HIE. The MassNet initiative will interconnect various regional rings into a broadband backbone spanning the state.

Challenges of the Current Environment

- Critical technical infrastructure and interfaces are needed to enable providers to connect to a state-wide HIE and achieve meaningful use.
- While Massachusetts providers exhibit high EHR adoption rates, it is not known how many are meaningful users of certified EHR.
- Certain provider types, such as behavioral health, substance abuse, and long-term care providers, are not eligible for federal EHR incentive programs but need to be supported to be linked to the HIE and participate in the exchange of patient information.
- Providers must manually enter clinical data multiple times in multiple systems.
- Patients' care and referrals are supported by manual processes.
- Critical clinical data cannot be shared across all providers state-wide and is not available at the point of care delivery.
- Non-standard interfaces and data create interoperability issues.
- Healthcare outcomes are difficult to measure given the limitations of current technology.

[28] http://assets1.csc.com/health_services/downloads/CSC_Adoption_of_EHR_Capabilities_in_Massachusetts_Physician_Practices.pdf, Page 2, paragraph 4.

E.2.1.2 Vision

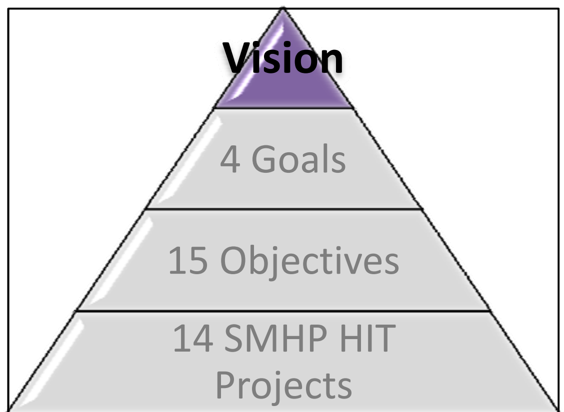


Diagram E.2.1.2: Focus on Vision

The SMHP vision for 2015 is the destination of the Roadmap. As summarized below and described in detail in Section B (The State's "To-Be" Landscape), the vision is not only completely aligned with, but fits wholly within the vision of the statewide HIT Plan. The vision statement for MassHealth is comprised of three major concepts that summarize the five-year outlook for the desired outcomes of the SMHP planning activities and Medicaid EHR Incentive Payment Program.

> "The MassHealth vision is for a healthcare delivery system that produces the highest quality healthcare outcomes in the nation while containing cost."
>
> "MassHealth envisions a more effective and efficient healthcare delivery system supported by fully interoperable health information supplied in a coordinated manner at the point of care and in real-time."
>
> "The MassHealth vision assures the privacy and security of everyone's healthcare information."

In addition to these over-arching vision statements, the vision includes the "Vision in Action" statements which are also articulated in Section B (The State's "To-Be" Landscape).

- MassHealth will be a full participant in a state-wide HIE by 2015.
- MassHealth and EOHHS will participate in the healthcare system as both consumers and providers of information.
- MassHealth and DPH will accumulate information such as immunization data and make it available in a secure real time fashion across the HIE at the point of care delivery.

E.2.1.3 Goals and Objectives

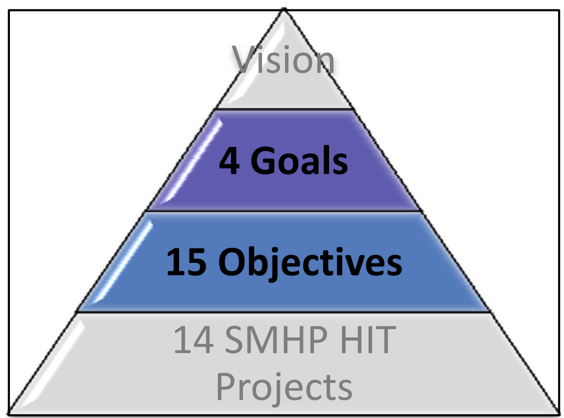


Diagram E.2.1.3: Focus on Goals and Objectives

As a result of conducting visioning meetings and meeting with external stakeholders, MassHealth developed four goals and fifteen objectives in support of the SMHP. MassHealth has carefully considered and maintained the connection to the State level HIT effort by adopting the four statewide HIT Plan goals for the SMHP and by incorporating the most relevant objectives from that same plan.

In addition to adopting 11 objectives from the state-wide HIT plan, MassHealth has modified one and added three additional objectives (*displayed in* ***<u>Bold and underlined italics</u>***) which reflect areas of significant importance to MassHealth's healthcare programs, to their providers, and to the program itself. Together, the SMHP goals lead MassHealth toward its HIT/HIE vision.

Goal 1: Improve access to comprehensive, coordinated, person-focused health care through widespread provider adoption and meaningful use of certified EHRs.
Objectives: 1.1 Equitably increase the number of providers who can demonstrate meaningful use of interoperable EHRs across all service areas, including rural, suburban and urban areas where health disparities have been identified. 1.2 Assure private and secure electronic access, use and portability of protected health information by all authorized individuals. 1.3 Increase the number of patients whose care is coordinated across disparate delivery systems within the state and across state boundaries.

Table E.2.1.3.1: SMHP Goals and Objectives (Goal 1)

Goal 2: Demonstrably improve the quality and safety of healthcare across all providers, through Health IT that enables better coordinated care, provides useful evidence-based decision support applications, and can report data elements to support quality measurement.
Objectives: 2.1 Equitably increase the number of ambulatory primary care providers that have re-engineered their care processes, to better manage chronic conditions, through adoption of patient centered medical home processes and Health IT that supports evidence-based care. 2.2 Adopt and promulgate a common set of Health IT enabled quality and safety measures across all payers and providers. 2.3 Commit to the principles that hospitals and healthcare providers would report quality and safety measures one way, one time and to one place, to ensure they are collected consistently and with minimum administrative burden. 2.4 ***<u>Behavioral Health, Substance Abuse and Long-Term Care Providers are included in the HIE to improve overall quality of care.</u>***

Goal 2: Demonstrably improve the quality and safety of healthcare across all providers, through Health IT that enables better coordinated care, provides useful evidence-based decision support applications, and can report data elements to support quality measurement.
2.5 ***Transitions of care will be improved across the population.*** 2.6 Adopt meaningful use measures, as defined by the federal government, for reporting purposes across all agencies.

Table E.2.1.3.2: SMHP Goals and Objectives (Goal 2)

Goal 3: Slow the growth of healthcare spending through efficiencies realized through the use of Health IT.
Objectives 3.1 All payers in the Commonwealth will adopt a single set of Federal standards for eligibility and claims payment processes, which will be incorporated into certified EHRs. 3.2 Patients report more timely, effective and appropriate care, both virtual and face to face. 3.3 Engage patients to actively participate in managing their health information, their health and their care, and encourage providers to engage with and respond to their patients.

Table E.2.1.3.3: SMHP Goals and Objectives (Goal 3)

Goal 4: Improve the health of the Commonwealth's population through public health programs, research and quality improvement efforts, enabled through efficient, accurate, reliable and secure health information exchange processes.
Objectives ***4.1 Efficiently track and demonstrate improvement in the Commonwealth's key public health measures.*** ***4.2 Develop and improve EOHHS infrastructure and capabilities to allow for robust participation in the Statewide HIE.*** 4.3 Support health reform in the Commonwealth, by providing ready access to data and information that is necessary for identification and implementation of key reform policies and strategies, being meticulous about protecting patient information and carefully following the minimum necessary use of information standards.

Table E.2.1.3.4: SMHP Goals and Objectives (Goal 4)

E.2.1.4 EOHHS SMHP Projects

E.2.1.4.1 EOHHS SMHP HIT Projects

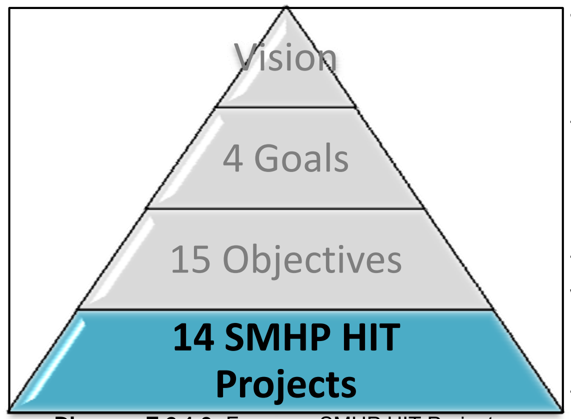


Diagram E.2.1.3: Focus on SMHP HIT Projects

The pathway to move from the current Medicaid HIT/HIE environment to the future environment is a core set of EOHHS strategic technology projects that build upon the strengths of the current environment, as well as the opportunities presented by the limitations of the current environment. These EOHHS projects are essential to providing the technical infrastructure to fully-implement the state-wide HIE and will enable providers to achieve meaningful use. The planning for these projects aligns with the state's overall HIT and HIE project timeline.

All 14 of the projects work together to support the goals and objectives described above and move MassHealth toward its long-term vision. The projects represent the tactical steps that EOHHS must undertake to achieve the future vision, and enable providers to connect to a state-wide HIE and achieve meaningful use objectives. Each project correlates to the SMHP goals and objectives listed above. The connection between the projects and the goals demonstrates that MassHealth and MeHI have planned for the activities that are necessary to move MassHealth along its pathway to fulfill its stated vision.

The Commonwealth recognizes that its HIT long-term vision is critical to the ultimate success of its delivery system projects including the multi-payer Patient Centered Medical Home Initiative, the work of the Children's Health Insurance Program Reauthorization Act (CHIPRA) Quality Demonstration Grant, the Duals Project, and the Commonwealth's Money Follows the Person application. The projects that EOHHS is planning to undertake as part of its HIT strategic plan will support these and other important efforts to realize the Commonwealth's ultimate vision for a nation healthcare system that provides top quality care while containing healthcare costs. These delivery system projects were developed collaboratively between MassHealth IT and MeHI and are discussed in Section E.2.1.4.4 below.

This section presents the 14 projects in four important ways:

1. A list of the 14 EOHHS HIT Projects, presented in alphabetical order.
2. A brief narrative and description of each of the 14 projects.
3. A mapping that connects each project to the four SMHP goals it is intended to support.
4. A project timeline

#	EOHHS SMHP HIT Projects
1	All Payer Claims Database
2	Claims Relay Service Analysis and Design Project
3	Connection to Quality Data Center
4	Direct Project Gateway Interface (formerly NHIN Direct)
5	Enterprise Record Locator Service (ERLS)
6	Formulary/Medication Management
7	MA Virtual Gateway

#	EOHHS SMHP HIT Projects
8	Medicaid EHR Incentive Payment Program
9	Provider Directory Interface
10	Public - Health Information Service Provider (P-HISP)
11	Public Key Infrastructure (PKI)/Certificate Management
12	Public Health - Health Level Seven (HL7) Interfaces
13	Re-architecting and Enabling Payment Methodologies
14	Statewide HIE Solution Integration Services

Table E.2.1.4.1: List of EOHHS SMHP HIT Projects

E.2.1.4.2 SMHP HIT Project Summaries

Following are summary descriptions of the 14 SMHP HIT projects planned to help move MassHealth from the current Medicaid HIT environment to the future vision. The State believes that these HIT projects are essential to further the capabilities of the state-wide HIE while at the same time providing the infrastructure and technical environment required to support providers in meeting the EHR meaningful use criteria and operationalizing other aspects of the Medicaid EHR Incentive Payment Program. Other projects will be executed by EOHHS and other state entities in order to support the state's overall HIT/HIE goals and objectives. EOHHS acknowledges that approval of the SMHP by CMS does not indicate CMS approval of funding or approach for these HIT-related projects. EOHHS will identify the appropriate funding source for each initiative and allocate costs to other payers and entities as appropriate, per the CMS State Medicaid Directors letter of May 18, 2011.

1. **Expand the All Payer Claims Database (APCD) to Include clinical data:**
    a. **General Description:** Extending the data model to add clinical data to the existing claims data already collected by the Department of Health Care Finance and Policy will provide important comparative data to assess the cost and quality improvements sought by implementing the Statewide HIE. MassHealth and Medicaid providers will derive particular value by ensuring that claims and clinical records are in sync and accurate. The extended clinical data can also be used to provide data mart level information to Quality Data Center vendors and directly to physicians in order to satisfy Meaningful Use quality measures (denominators).

    b. **Medicaid Correlation:** Medicaid claims reconciliation and cost analysis will be substantially enhanced by correlating claims data to clinical data by integrating the HIE with the APCD.

2. **Claims Relay Service Analysis and Design Project**
    a. **General Description:** A claims relay service will provide a single gateway for the submission of EDI claims for MassHealth claims processing. The service would include the translation of the EDI into the appropriate, platform specific formats. The service will also transmit the claim to the appropriate claims engine.

        Claims at times are submitted that can be split between medical and pharmacy. In this case the Service would do just that, route the claim as appropriate, and track its separate adjudication events, and then re-assemble a single response to the submitter.

    b. **Medicaid Correlation:** MassHealth currently manages 4 separate platforms to process claims:

        - MMIS for medical claims

- POPS for pharmacy claims
- DentaQuest platform for dental claims
- Health Safety Net claims platform for HSN program claims

Each system processes claims of a certain type, and rejects claims that are not appropriate for that specific claims engine. The Relay Service would insure that the right claims engine receives and process the right claim. The scope of this analysis may expand to managing the receipt of prior authorization requests as well. Analysis is required to determine the feasibility and scope of this concept. Once the cope is defined, the design can be developed. A follow-on project would be established for the build, test, and delivery of the design.

3. **Connection to Quality Data Center (QDC):**
   a. **General Description:** The Statewide HIE will provide two critical services in terms of quality reporting. The first service is clinical data acquisition which relates to the All Payer Claims Database. By extending the APCD data model to collect and utilize clinical data, QDCs will have a single point of contact for the acquisition of clinical data and/ or a secondary capture-point for clinical data to ensure that direct-from-provider data is accurate. Second, the Statewide HIE will facilitate the matching of providers to QDC vendors. Both of these services will be valuable for Medicaid providers in meeting their Meaningful Use obligations and, given scarce resources in many instances, the Statewide HIE may be able to help lower the overall cost and time burden of quality reporting.

   b. **Medicaid Correlation:** Medicaid providers will benefit from access to Quality Data Center services that are facilitated by the HIE and via relationships with QDC vendors that are brokered by the HIE.

4. **Direct Project Gateway Interface (formerly NHIN Direct):**
   a. **General Description:** The Direct Project offers a less complex point-to-point method for transmitting clinical summary documents. This Direct Project is a stop-gap push transaction option for providers and provider organizations that have a longer horizon to implement machine-to-machine push and, eventually, pull clinical information exchange. The Statewide HIE can further simplify the usage of the Direct Project push transaction by providing an increased level of documentation, training and a common HIE interface to those that wish to utilize this method. This can be further augmented via P-HISP(s) that will perform authentication, encryption and trust verification on behalf of Medicaid providers in order to facilitate Direct Project implementation connectivity. Medicaid providers will benefit from having a technologically less complex method to accomplish Meaningful Use Stage 1 push transaction objectives.

   b. **Medicaid Correlation:** Enables Medicaid providers to utilize the Direct Project point-to-point clinical message transfer via HIE infrastructure and/ or P-HISP.

5. **Enterprise Record Locator Service (ERLS):**
   a. **General Description:** The Statewide ERLS will provide a critical service for the anticipated requirements of Stage 2 Meaningful Use where bi-directional exchange will be necessary. The ERLS will hold the information necessary to successfully implement a predictive matching index. The predictive index will enable the provider to perform a patient lookup in order to pull information from other providers without the workflow overhead associated with push only transactions. Medicaid providers will benefit significantly by having timely access

to up to date clinical information. MassHealth will benefit by increasing the accuracy of broad quality, epidemiological and cost analysis.

b. **Medicaid Correlation:** The HIE ERLS will enable bi-directional clinical data transfer for Medicaid providers. ERLS services will also facilitate patient management of their health information. Also, this will facilitate and make more efficient the correlation of health and claims data.

6. Formulary/ Medication Management:

a. **General Description:** Reducing errors in drug identification and dosing can improve patient health. A 2006 Institute of Medicine report estimated that ≥1.5 million patients are harmed each year by medication errors, resulting in a cost of billions of dollars. Access to accurate medication data is critical to improving both prescribing practices as well as patient compliance. Medicaid providers and patients will derive significant value beyond ePrescribing if medication histories are available statewide and formularies are consistent across provider locations. While medication histories are available in the pharmacy point of sale system and the NewMMIS, with this project, the prescriber will have global access to a member's medication history across payers.

b. **Medicaid Correlation:** Ensure a common, up-to-date service for Medicaid providers to utilize for formulary and medication management.

7. MA Virtual Gateway:

a. **General Description:** The Virtual Gateway (VG) is the front-door for many of the state's health-related services, for example verifying Medicaid status and provisioning new Medicaid members. The Virtual Gateway provides a secure access point for providers and patients to perform administrative tasks. The ability to extend an existing set of public-facing administrative infrastructure allows the Statewide HIE to piggy-back on systems and, perhaps more importantly, on a trusted, well-maintained interface that will promote adoption and lower training costs. Medicaid providers and administrative staff, in particular, are familiar with the Virtual Gateway based on their experience in the Medicaid provisioning process and will be quick to adopt additional functionality.

b. **Medicaid Correlation:** Use VG as administrative front end for HIE, e.g. access to consent management interface.

8. Medicaid EHR Incentive Payment Program:

a. **General Description:** This project provides federally-funded financial incentives to Eligible Professionals and hospitals to adopt, implement, and upgrade and demonstrate meaningful use of certified EHRs. The project includes outreach and communications to providers to promote EHR adoption. The project will also include an annual provider survey to collect required data for CMS reporting, as well as data to measure progress toward project EHR adoption benchmarks.

b. **Medicaid Correlation:** This project targets certain Medicaid provider types who meet certain criteria, including minimum Medicaid patient volume thresholds. Given the patient population served, many Medicaid providers will require this financial support in order to meet state and federal requirements for adopting HIT.

9. Provider Directory Interface:

a. **General Description:** Massachusetts will begin by focusing on an entity-level directory that will enable transactions from the "front door" of one organization to

another. This "yellow pages" approach will be implemented first and will allow a significant number of MA providers to connect by relying on the yellow pages to establish organization-to-organization routing and then utilizing local routing schemes to make the last mile connection to the provider. The second phase of directory implementation will take a "white pages" approach to include all provider addresses in order to facilitate clinical exchange in small and large organizational environments. Medicaid providers will utilize the provider directory to fulfill their meaningful use obligations, in particular as the exchange obligations are anticipated to increase when Stage 2 Meaningful Use requirements are expected, including "pull-based" transactions.

b. **Medicaid Correlation:** Integrating with Medicaid systems and enabling single front door for Provider Directory information.

10. <u>Public - Health Information Service Provider (P-HISP):</u>

a. **General Description:** The Public Health Information Service Provider (P-HISP) capability will consist of one or multiple contracts with vendor(s) to provide Health Information Exchange (HIE) services at a subsidized cost to providers that meet certain economic and technical qualifications. Some provider organizations, particularly those not affiliated with a larger parent or network organization will likely require capital, technical, training and implementation assistance in order to fully participate in the Statewide HIE. It is likely, given provider demographics, that Medicaid providers, in particular, will utilize this subsidized option.

b. **Medicaid Correlation:** It is anticipated that Medicaid providers will make up a large percentage of the P-HISP user base. HIE capability will be critical for the ability of Medicaid Providers to meet Meaningful Use requirements.

11. <u>Public Health - Health Level Seven (HL7) Interfaces:</u>

a. **General Description:** The HL7 Gateway is an EOHHS enterprise gateway used to exchange the HL7 messages between Healthcare Providers and EOHHS applications. The gateway uses secure web service for data exchange and it is integrated with EOHHS centralized Access and Identity Management Service (AIMS) for authentication and authorization, and with IBM Websphere Transformation Extender (WTX) for HL7 message transformation. It was originally developed for Massachusetts Immunization Information System (MIIS) to support the providers to demonstrate the "meaningful use" criteria. As part of SMHP, the HL7 Gateway shall be expanded and integrated with the following Public Health systems that require HL7 interface in order to improve the public health response and support the "meaningful use" criteria. Interfaces include:

- Electronic Laboratory Reporting System (ELR)
- Massachusetts Immunizations Information System (MIIS) to support additional HL7 message types (Query By Parameter and Query By Example)
- Syndromic Surveillance System (SSS)
- Prescription Monitoring Program (PMP)
- Bureau of Substance Abuse Service - Opioid Treatment Provider
- Women's Health Network / Men's Health Partnership
- School Based Health Centers
- Childhood Lead Poisoning Prevention Program (CLPPP)
- Children's Behavioral Health Initiative (CBHI)

The HL7 Gateway shall be enhanced to add the following new features:

- Support for bi-directional health information exchange between EHR and Public Health systems.
- Receipt and Processing of HL7 batch messages in asynchronous mode.
- Expand the capacity of WTX engine to support increase in volume of transactions.

b. **Medicaid Correlation:** Medicaid providers will benefit from the ability to directly report public health information via the Statewide HIE.

12. Public Key Infrastructure (PKI)/ Certificate Management:

a. **General Description:** Public Key Infrastructure and Certificate Management services are vital to establishing a trusted connection between sending and receiving providers as well as provider to patient data exchange. The state will implement PKI and Certificate Management services as a fundamental aspect of the Statewide HIE set of centralized services. Secure data transfer from verified trading partner to verified trading partner is crucial in establishing the trust relationship with Medicaid providers and patients that will inspire broad HIE adoption.

b. **Medicaid Correlation:** Rationalize HIE and Medicaid security infrastructure. Integrate HIE and State ESB security systems.

13. Re-architecting and Enabling Payment Methodologies:

a. **General Description:** This project entails a thorough review of the Technical Architecture of the Managed Care system within the new MMIS and the development of a plan to remediate the processes overall. The end result will be a greatly improved platform that will support evolving Managed Care programs for the Commonwealth that will drive down costs and improve quality.

The Managed Care process needs to be more configurable, and less dependent on hard coding. For example, the events triggering Managed Care enrollment and disenrollment should be table driven, providing the business with the flexibility to easily and quickly configure plan-specific events (like age changes or aid category changes) that control the process.

The enrollment/disenrollment process should also occur in real-time, along with the real-time creation and transmission of the 834.to the Managed Care entities. Today's processes run overnight, in batch mode, with severe performance issues that challenge MassHealth's service level agreements for the delivery of transactions to the Managed Care entities.

b. **Medicaid Correlation:**
The Managed Care components of the Massachusetts MMIS provide a technical platform for:

- The establishment of MCO plans along with their contracted rate structure
- Managing member enrollments/disenrollments into Managed Care plans
- Transmitting notifications of enrollment status to MCO's (834 transactions)
- Monthly capitation processing and transmission of 820 transactions
- Monthly reconciliation adjustments

It is likely that MassHealth will continue to be more dependent on new business programs which will be implemented via managed care enrollment and capitated payment processing. For example, the MMIS is in receipt of a change order to implement the Patient Centered Medical Home Initiative. MassHealth is also in design discussions with the MMIS team regarding its Duals Project, which is envisioned as a capitated program. Likewise, there are several discussions underway regarding moving the Massachusetts healthcare payment system towards Global Payments.

14. **Statewide HIE Solution Integration Services:**
   a. **General Description:** Solution Integration services are critical to any complex enterprise project and, in particular, to the Massachusetts HIE implementation. The state will be selecting qualified vendors for each of the services or service sets that are required to provide Statewide HIE services. An overall solutions integration vendor rationalizes the services of one vendor with other vendors and provides a cohesive, single front-door to a complex set of services from multiple vendors. Medicaid providers and patients will benefit from having a single point-of-contact for implementation, training and problem resolution. The solution integrator will also be the key contact to integrate with critical state systems, e.g. immunization, lab and syndromic surveillance.
   b. **Medicaid Correlation:** The HIE solution integrator will ensure that HIE and Medicaid systems are tightly integrated creating interfaces as needed. The solution integrator will also create the other private and public interfaces that will enable Medicaid providers to conduct bi-directional clinical summary exchange. The PMO will conduct the following activities which provide significant value to Medicaid providers and clients: certificate management; manage directories; develop and support implementation guides; provide machine-to-machine interoperability with HIE participants; manage the interface with EHR vendors (HISPs); assist with conformance testing; and provide HIE Certification.

E.2.1.4.3 SMHP HIT Projects Mapped to Goals

The process of mapping projects to the SMHP goals demonstrates to CMS and state leadership that the projects identified will work together to achieve the established goals and objectives. The table also serves to demonstrate that all selected projects are directly supportive of the SMHP goals and objectives. It is important to note, however, the projects are inter-related and all goals are supported of each other. It is also important to mention that these hare the HIT projects planned to support the SMHP goals, and that other projects and initiatives will be occurring state-wide to move the state toward the SMHP vision and goals.

SMHP Goal	SMHP HIT Projects
Goal 1: Improve access to comprehensive, coordinated, person-focused health care through widespread provider adoption and meaningful use of certified EHRs.	4. Direct Project Gateway 5. Enterprise Record Locator Service (ERLS) 6. Formulary/Medication Management 7. MA Virtual Gateway 8. Medicaid EHR Incentive Payment Program 9. Provider Directory Interface 10. P-HISP 11. Public Health - Health Level Seven (HL7) Interfaces 12. Public Key Infrastructure (PKI)/Certificate Management 14. Statewide HIE Solution Integration Services
Goal 2: Demonstrably improve the quality and safety of health care across all providers, through Health IT that enables better coordinated care, provides useful evidence-based decision support applications, and can report data elements to support quality measurement.	1. All Payer Claims Database 3. Connection to Quality Data Center 5. Enterprise Record Locator Service (ERLS) 6. Formulary/Medication Management 8. Medicaid EHR Incentive Payment Program 11. Public Health - Health Level Seven (HL7) Interfaces
Goal 3: Slow the growth of healthcare spending through efficiencies realized through the use of Health IT.	1. All Payer Claims Database 3. Connection to Quality Data Center 7. MA Virtual Gateway 8. Medicaid EHR Incentive Payment Program 13. Re-architecting and Enabling Payment Methodologies
Goal 4: Improve the health of the Commonwealth's population through public health programs, research and quality improvement efforts, enabled through efficient, accurate, reliable and secure health information exchange processes.	1. All Payer Claims Database 2. Claims Relay Service Analysis and Design Project 3. Connection to Quality Data Center 4. Direct Project Gateway Interface 5. Enterprise Record Locator Service (ERLS) 7. MA Virtual Gateway 8. Medicaid EHR Incentive Payment Program 10. P-HISP 11. Public Health - Health Level Seven (HL7) Interfaces 12. Public Key Infrastructure (PKI)/ Certificate Management 13. Re-architecting and Enabling Payment Methodologies 14. Statewide HIE Solution Integration Services

Table E.2.1.4.3: EOHHS HIT Projects Mapped to Goals

E.2.1.4.4 Timeline for Implementing SMHP HIT Projects

The following table illustrates the phasing of each of the 14 planned SMHP HIT projects through 2015. Blue boxes indicate time associated with planning activities and green boxes estimate the implementation period. The timeline demonstrates that the plans are in place to move key strategic projects forward in order to achieve the four SMHP goals and vision for 2015.

Project	SFY 2011				SFY 2012				SFY 2013				SFY 2014				SFY 2015			
SMHP HIT Projects	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
2. Claims Relay Service Analysis and Design Project																				
11. Public Health - Health Level Seven (HL7) Interfaces																				
3. Medicaid EHR Incentive Payment Program																				
7. MA Virtual Gateway																				
12. Public Key Infrastructure (PKI)/ Certificate Management																				
1. All Payer Claims Database																				
10. Public Health Information Service Provider (P-HISP)																				
14. Statewide HIE Solution Integration Services																				
5. Enterprise Record Locator Service																				
9. Provider Directory Interface																				
13. Re-architecturing and Enabling Payment Methodologies																				
4. Direct Project Gateway (formerly NHIN Direct) - Phase III																				
6. Formulary/Medication Management																				
3. Connection to Quality Data Center																				

Table E.2.1.4.4: Timeline for Implementing EOHHS HIT Projects[29]

E.2.1.4.5 Other EOHHS Projects Supporting the Long-term SMHP Vision

Other significant initiatives are underway at EOHHS that will support the implementation of the Medicaid EHR Incentive Payment Program and help to achieve MassHealth's SMHP vision. These projects are not IT focused, but their success will be dependent, in part, on the enhanced HIT infrastructure that EOHHS will create with the projects above. The projects described below are significant system redesign projects, including the Patient Centered Medical Home Initiative.

Patient Centered Medical Home Initiative (PCMHI):

This initiative entails developing a framework for a multi-payer patient-centered medical home effort involving the major Massachusetts commercial and Medicaid payers, and a diverse group of primary care practices. The PCHMI delivery model involves transforming primary care providers, including Community Health Centers, into patient-centered medical homes over a four-year period. The initial group of Primary Care Providers, with approximately 50,000 MassHealth PCC Plan members, has been selected and activities to transform these practices are underway. The ultimate goal is to expand the PCMHI delivery model to all MassHealth primary care providers, statewide, over the next several years.

Affordable Care Act (ACA) Projects:

The following graphic depicts the major technical, administrative, and clinical infrastructure components essential to effectively implement the provisions of the ACA. These components include: required Health Insurance Exchange (HIX; Massachusetts already has the Connector authority as its HIX); Eligibility systems that interact efficiently and comprehensively with the HIX; HIEs that provide the pipeline for the movement of clinical information in real time; improvements in service approaches, client coordination, and reimbursement strategies; and enhanced quality reporting. Taken together, all of these components provide the opportunity for states to transform their healthcare systems by implementing comprehensive and complementary new or enhanced systems, clinical and administrative processes, and quality reporting metrics.

[29] Project 3, the "Medicaid EHR Incentive Payment Program" is planned to continue into SFY 2021.

MassHealth recognizes that the current national and state political environments offer a once in a generation opportunity to transform the Massachusetts healthcare system by strategically investing in Health Information Technology. As the diagram below illustrates, the SMHP and EHR adoption initiatives not only work to achieve the specific HIT and HIE vision and goals put forth in the SMHP, but support meeting ACA requirements and opportunities. Massachusetts, as a national leader in HIT and clinical quality improvement, stands in the vanguard of states poised to implement integrated administrative and clinical systems architecture as envisioned within the ACA. This opportunity is reflected throughout the MassHealth SMHP.

As depicted below, the SMHP and the Medicaid EHR Incentive Payment Program, are two important components in the Commonwealth's HIE Plan. Success within the ACA context requires not just proliferation of electronic health records, but the success of many other HIT, clinical, and administrative process improvements, too. Massachusetts recognizes the critical importance of moving forward not just one component but the entire suite of ACA components. The MassHealth SMHP reflects this vision of coordinated implementation of many different initiatives which, as a whole, are intended to ultimately improve health outcomes for the entire population.

Additionally, the success of the CHIPRA Quality Demonstration Grant's core measures and medical home projects, though not IT focused, will likewise be dependent, in part, on the enhanced HIT infrastructure that EOHHS will create with the projects above.

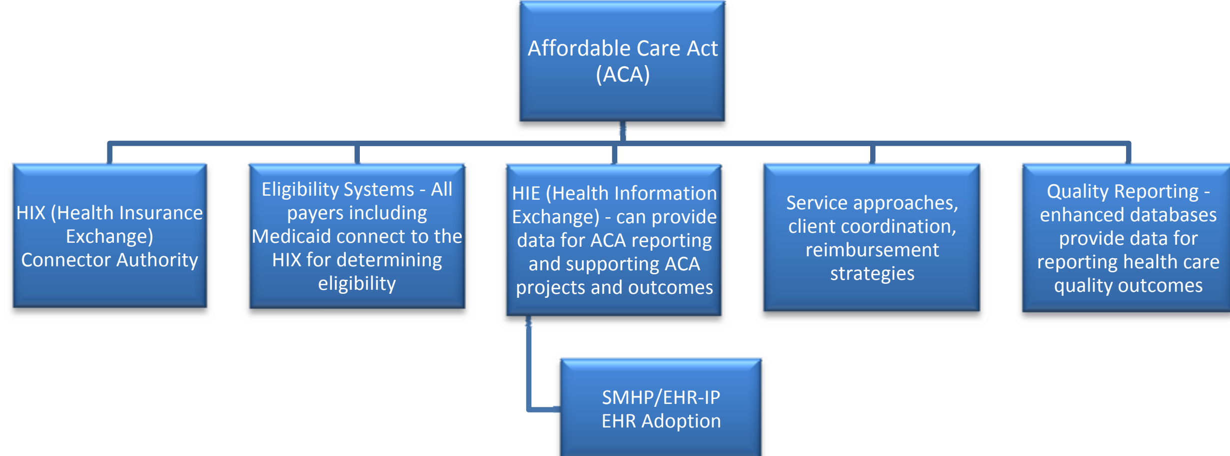


Diagram 2.1.4.5: Relationship between ACA and HIT Projects

Duals Project:

The Commonwealth's dual eligible adults ages 21-64 have disproportionately experienced the shortcomings of the fee-for-service (FFS) payment system and fragmented, uncoordinated care, simply because few alternatives are available to them. Massachusetts proposes to assume operational responsibility for all of the medical needs of its younger dual eligible adults. Specifically, the Commonwealth proposes to fully integrate the delivery, management, administration and financing of all Medicare and Medicaid benefits at the state level for dual eligible adults ages 21-64 years. The success of this integration will be highly dependent on providers adopting EHR and meeting meaningful use requirements. Many of the HIT Projects discussed above will allow participating providers to better coordinate care, reduce overuse and improve quality for dually eligible individuals.

Money Follows the Person Rebalancing Demonstration Project:

The Money Follows the Person (MFP) Rebalancing Demonstration is part of a comprehensive, coordinated strategy to make widespread changes to long-term care support systems. This initiative assists in efforts to reduce reliance on institutional care, while developing community-based long-term care opportunities, enabling the elderly and people with disabilities to fully participate in their communities. The Enterprise Record Locator Service (ERLS) project will allow EOHHS agencies to better coordinate care provided across the different agencies; a number of other HIT projects will allow for the providers serving this group to better coordinate their care and support community living.

E.2.2 Graphical Pathway

The graphical pathway represents the key milestones for the 14 strategic projects. Together, these milestones represent the journey from the state's current Medicaid HIT/HIE environment to the state's future Medicaid HIT/HIE environment. As the state recognizes that projects and timelines may change over time, this Graphical Pathway will be revisited and adjusted as necessary during the annual updates to the SMHP to reflect actual project status as needed.

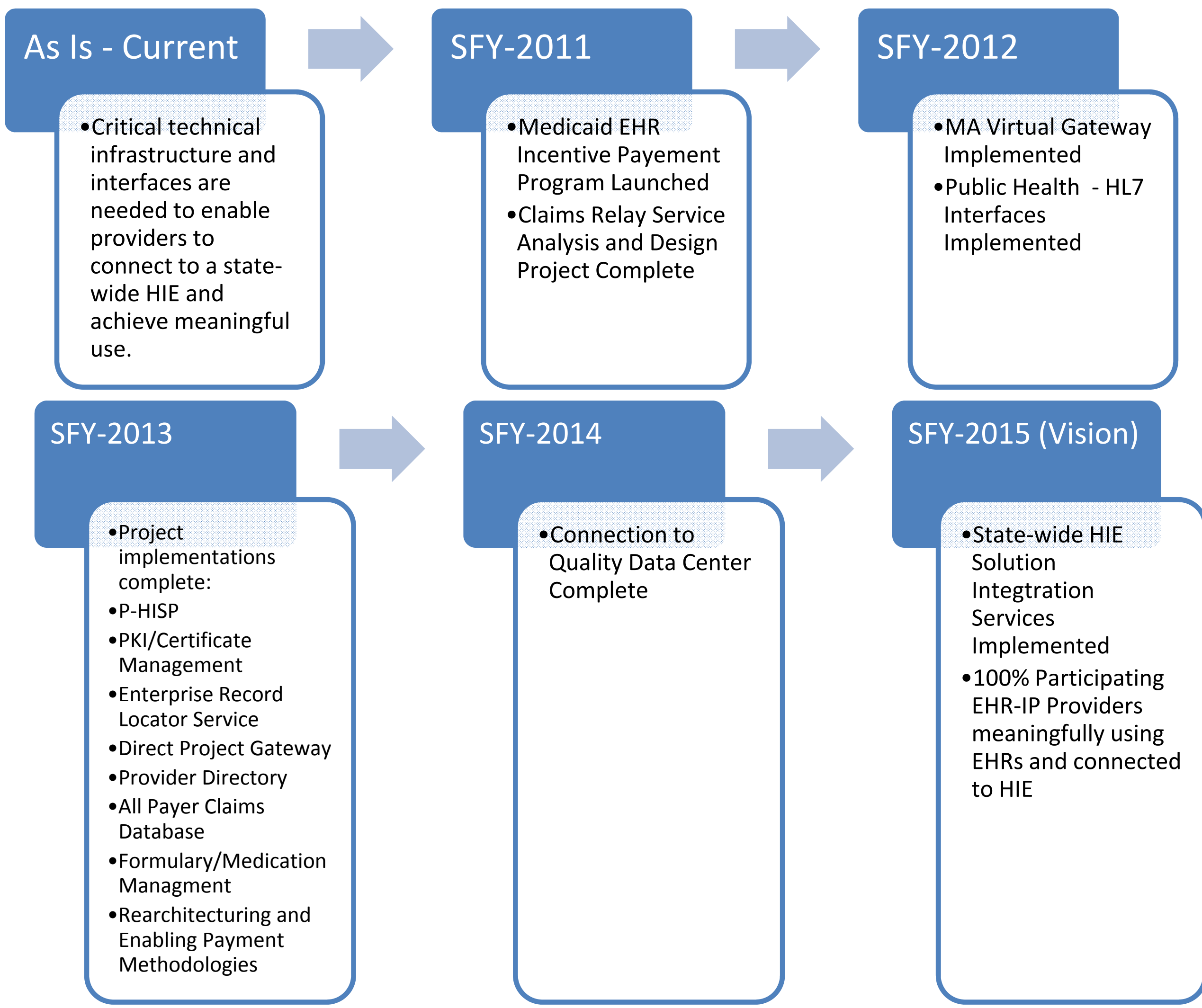


Diagram E.2.2: The Roadmap's Graphical Pathway

E.2.3 Benchmarks

E.2.3.1 Benchmarks for Goals

MassHealth understands that CMS has requested that States begin to establish processes for developing annual benchmarks that mark progress toward each of MassHealth's SMHP stated goals (see Section E.2.1.3, Goals and Objectives). The purpose of these benchmarks will be to serve as clearly measurable indicators of progress along the Roadmap. In regards to the Medicaid EHR Incentive Payment Program, Massachusetts has developed preliminary benchmarks that measure the expected participation in the program by EPs and Hospitals (see Sections E.2.3.2 and E.2.3.3). MassHealth will measure provider Medicaid EHR Incentive Payment Program participation on a monthly basis during program operation. If participation is below the expected benchmark EOHHS will evaluate by contacting professional organizations and utilizing annual provider survey results to determine why participation is below expected rates. Additionally, this work will consider variances based on provider type and geographic region. These evaluations will allow EOHHS to adjust outreach, education and technical assistance accordingly to raise the level of participation. MassHealth may need to increase Medicaid EHR Incentive Payment Program staffing levels if it becomes necessary to accommodate a higher than expected level of provider participation.

MassHealth will continue to refine and develop additional benchmarks as progress is made with identified IT Projects (see E.2.1.4, EOHHS SMHP Projects). Several projects exist that when complete, will provide improved access to healthcare data that will facilitate and expedite development of future benchmarks. For example, the All Payer Claims Database initiative will provide improved access to data that previously did not easily exist, that will be utilized within future Benchmarks to measure progress toward the identified SMHP goals. At a minimum, the Commonwealth anticipates updating the Benchmarks section of the SMHP on an annual basis.

E.2.3.2 Benchmark - Expectations Regarding Provider Participation (EPs)

Based on estimates of eligible provider types, MassHealth estimates that 6,220 providers will be eligible for the Medicaid EHR Incentive Payment Program in Calendar Year 2011.

Provider Type	Total estimated number of providers	Estimated % will meet Medicaid patient volume threshold	Estimated # will meet Medicaid patient volume threshold	Source
Physicians (includes pediatricians)	20,000			BORIM
(86% of the Physician total is estimated to be non hospital-based)	17,200	20%	3,440	CMS Final Rule
Nurse Practitioners	6,424	20%	1,194	Kaiser
Dentists	7,023	20%	300	BORID
Certified Nurse Midwives	457	20%	91	www.listentowomen.org
Total EP Provider Types	31,104	20%	6,220	

Table E.2.3.2.1: Estimated Medicaid EHR Incentive Payment Program Participation by Provider Type

Based on CMS guidance, we have projected a 1% increase in EPs per year. MassHealth has set the goal of enrolling over 85% of EPs in the program by 2016, the last year providers can request an initial incentive payment. This goal is consistent with the CMS estimates provided in the Final Rule (see page 44559). In order to determine the number of new providers Massachusetts can expect to enroll per year, MassHealth has applied the percentages in Line 6 of Table 34 in the Final Rule (see page 44559). The estimated uptake percentage for 2011 is revised to 15.7% from 47.3% because the program is expected to begin in August, allowing for four months of payments. It is important to note that Medicaid EHR Incentive Payment Program payments will continue through 2021, representing the last year of the six-year payment cycle of providers requesting payment in 2016. The purpose of this table is to show the total number of providers who will enroll in the program in a given year from the time the program is launched through 2016, the final year of enrollment.

Description	CY-2011	CY-2012	CY-2013	CY-2014	CY-2015	CY-2016
n= # of EPs	6,220	6,282	6,345	6,408	6,473	6,538
#Massachusetts New EPs Estimated to Receive Incentive Payments per Year	977	3,188	695	407	274	265
#Massachusetts EPs Estimated to Receive Incentive Payments per Year	977	4,165	4,860	5,267	5,541	5,806
CMS Estimate of % of EPs Receiving Incentive Payments during the Year	15.7%	66.3%	76.6%	82.2%	85.6%	88.8%

Table E.2.3.2.2: Estimated Annual Medicaid EHR Incentive Payment Program Uptake Rate

Description	CY-2017	CY-2018	CY-2019	CY-2020	CY-2021
n= # of EPs	6,538[30]	6,538	6,538	6,538	6,538
#Massachusetts New EPs Estimated to Receive Incentive Payments per Year	0	0	0	0	0
#Massachusetts EPs Estimated to Receive Incentive Payments per Year	2,864	1,635	941	536	307
CMS Estimate of % of EPs Receiving Incentive Payments during the Year	43.8%	25.0%	14.4%[31]	8.2%	4.7%

Table E.2.3.2.3: Estimated Annual Medicaid EHR Incentive Payment Program Uptake Rate

[30] 2017 is the first year where new EPs will not be able to apply for the incentive payment, therefore the 1% increase each year has not been applied to years 2017-2021.

[31] 2019 is the last year where the guidance provided by CMS on page 44559 of the Final Rule, Table 34, row 6, included estimates for the percentage of EPs receive Incentive Payments. For estimation purposes subsequent years to 2019, have assumed a reduction of 57% from the previous year, consistent with the drop percent reduction estimated by CMS from 2017 to 2018, and 2018 to 2019.

E.2.3.3 Benchmark - Expectations Regarding Hospital Participation

The following table estimates the number of Eligible Hospitals that will participate in the Medicaid EHR Incentive Payment Program in Massachusetts for the foreseeable future. This table has been developed based on the estimated percentages of potential Medicaid Incentives associated with eligible hospitals and estimated percentage payable each year identified in the Final Rule (Table 36):

Calendar Year	Estimated Percentage	Estimate
2011	39.1%	25
2012	54.4%	34
2013	70.9%	45
2014	83.1%	53
2015	92.9%	59
2016	97.1%	62
2017	99.0%	63
2018	100.0%	64
2019	100.0%	64
2020	100.0%	64
2021	100.0%	64

Table E.2.3.3: Estimated Number of Massachusetts' based Hospitals
That are planned to participate in the Medicaid EHR Incentive Payment Program

State legislation (Chapter 305) identifies unique requirements for Hospitals that will impact participation in the Medicaid EHR Incentive Payment Program. Among the deadlines of Chapter 305, enacted in August 2008, is a requirement that mandates implementation of computerized physician order entry (CPOE) systems by October 2012 and another that requires hospitals to demonstrate interoperable EHR use by October of 2015.

E.2.3.4 Expectations Regarding Provider EHR Technology Adoption over Time and Annual EHR Benchmarks by Provider Type

Given the availability of the financial incentives through the Medicaid EHR Incentive Payment Program, the technical assistance from the REC IOOs, and the state-wide mandate (Chapter 305) for EHR competency by 2015, MassHealth expects that 100% of Medicaid EHR Incentive Payment Program participating Medicaid providers regardless of provider type will meet the state mandate and have adopted EHRs by January 1, 2015.

Additional information and analysis is required to refine the annual benchmarks by provider type (this information was not available at this time). The current survey indicates that certain eligible provider types, such as dentists, have a lower EHR adoption rate than other provider types such as physicians. MassHealth and MeHI plan to conduct annual Provider Surveys and will utilize MAPIR data to develop the annual EHR benchmarks by provider type.

E.2.3.5 Benchmarks for Audit and Oversight Activities

As described in Section D (The State's Audit Strategy), the Commonwealth's Audit Strategy leverages MassHealth's existing provider enrollment and program integrity processes, which include both pre- and post-payment methods to avoid making improper payments before payments are disbursed, and processes to detect and follow-up on improper payments after the fact. Section D (The State's Audit Strategy) includes the process for monitoring both provider

payments and the Medicaid EHR Incentive Payment Program operations and management, as well as strategies to prevent and detect fraud and abuse.

Based on the contents of the Audit Strategy, MassHealth will develop future benchmarks that measure the success of the Audit approach in keeping Medicaid EHR Incentive Payment Program payments accurate and consistent with federal rules.

E.2.4 Steps to Make the Incentive Payments to Providers

The specific activities MassHealth will take to make the incentive payments to its providers are described in detail in Section C (Activities Necessary to Administer the Incentive Program) of the SMHP. In addition, Section E.1.1 above details the planning and pre-implementation tasks required to implement the Medicaid EHR Incentive Payment Program.

E.2.5 Steps to Monitor Provider Eligibility and Meaningful Use

Provider eligibility for the Medicaid EHR Incentive Payment Program and achievement of meaningful use will be monitored throughout the life-cycle through the pre-payment and post-payment verification processes. These processes are described in detail in Section C and D.

The Provider Enrollment and Eligibility Verification process includes investigating provider attestations, conducting a series of pre-payment verifications and calculating the EHR incentive payment. The Medicaid EHR Incentive Payment Program leverages many of the current provider enrollment, provider maintenance and provider compliance processes that MassHealth already has in place. Provider eligibility will be monitored on an annual basis through the attestations that providers make in MAPIR. MAPIR captures provider information submitted during the application and attestation process and will apply real-time edits to verify that values entered are valid and that required fields are completed. MeHI/EVOT and MassHealth will then review these attestations and other provider information provided in MAPIR in order to determine if the provider's information has been verified for payment.

As described in Section D (The State's Audit Strategy), during the post-payment verification process, the MassHealth Provider Compliance Unit (PCU) will conduct full manual reviews of selected provider payments. This is an additional program oversight step to ensure that provider payments are being distributed according to the federally-required eligibility and meaningful use criteria.

E.2.6 Steps to Support Provider Adoption of Certified EHR Technologies

MassHealth and its partners are currently engaged in several activities to support provider adoption of certified EHR technologies. These activities fall into the two primary service areas of provider outreach and education and technical assistance.

E.2.6.1 Provider Outreach and Education

Section C.1 (Provider Outreach and Education) and the joint MassHealth-MeHI Communication and Marketing Plan outline the approach to communicating with providers about the Medicaid EHR Incentive Payment Program and EHR adoption. The MassHealth-MeHI Communication and Marketing Plans create a framework and strategy for the activities and methodologies that will be used to help to ensure the Medicaid EHR Incentive Payment Program is visible, easily understood, and adoptable by MassHealth providers.

E.2.6.2 Technical Assistance to Providers

In addition to these Medicaid EHR Incentive Payment Program specific outreach activities, MeHI/REC, as the state's designated Regional Extension Center (REC) and approved Implementation and Optimization Organizations (IOOs) will deliver technical assistance directly to providers. These services consist of:

- Individualized and on-site assistance
- Clinical and administrative workflow analysis and redesign
- Help in selecting EHR software
- Negotiate discounts from preferred EHR vendors and Implementation and Optimization Organizations
- Alignment with financial institutions offering healthcare IT financing
- Assistance with achieving and continuing to demonstrate Meaningful Use criteria for maximum federal incentive payments
- Access to MeHI/REC member forums, CoPs and Webinars
- Guidelines and best practices for Privacy and Security policies and other regulatory requirements
- Assessment of EHR interoperability for health information exchange (HIE)

MeHI/REC will provide grants to 2,500 priority Eligible Professionals to install EHRs and serve as a resource for promoting the Medicaid EHR Incentive Payment Program. By the end of January, MeHI/REC reported that 1,700 providers had been enrolled through the REC and they expect to enroll the remaining 800 providers by the end of March 2011. The MeHI/REC will also offer ongoing support and education for all health care providers in the Commonwealth, including federally qualified health centers, community health centers, and critical access and public hospitals.

IOOs, through agreements with MeHI/REC, deliver Health IT services that will support adoption and meaningful use of certified EHRs within the physician offices. The IOOs will in turn contract with providers to offer a full range of adoption and meaningful use support services, including clinical and technical implementation. Once providers are operational, the IOOs will recommend them as compliant with Chapter 305 and eligible for participation in the Statewide HIE. This model provides unique benefits and efficiencies, as it will permit the Commonwealth to harness the services of all of the highly experienced MeHI/REC approved IOOs in the state simultaneously, thus accelerating the goal of statewide EHR adoption.

In addition, MeHI and MassHealth will conduct a "gap analysis" to determine which MassHealth providers may be under-represented in both the Medicare and MassHealth Provider Incentive Payments Programs. For those MassHealth providers that may not be eligible for either incentive program, MeHI and MassHealth will develop specific initiatives to support these MassHealth providers to acquire or upgrade certified EHRs as well as to support the providers in their meaningful use of the EHR systems.

E.2.7 Plan for MassHealth's Role in HIE

The 14 HIT projects included in this SMHP create essential technical infrastructure to enable the state-wide HIE to function. MassHealth and EOHHS are key leaders in the development of a state-wide HIE through their participation in the state's HIT Council. As a key leader in the state's HIE efforts, MassHealth will work with other state stakeholders to implement the goals of

the Commonwealth of Massachusetts 2010 HIE Strategic and Operational Plan and ensure that existing infrastructure is leveraged to foster HIE between Medicaid's trading partners within the state, with other surrounding states, and with federal providers and partners. Goal 1 of the state's HIE Plan is to "Facilitate the flow of health information at the community, state, regional and national levels." In addition, MassHealth participates in the New England States Consortium of Systems Organizations (NESCSO), which focuses in part on collaborating on issues pertinent to eHealth activity in the New England region.

EOHHS plans to build an HL7 Gateway as the primary means for clinical data exchange between providers and EOHHS. This technology will replace manual, error-prone, and duplicative method of sharing client information with a mechanism for the electronic transfer of data from the provider's EMR system directly to EOHHS. Clinical data exchange via an HL7 Gateway will enable EOHHS to accept real time clinical information regarding clients to better monitor utilization of services and quality outcome measures. The HL7 Gateway will enable messages from provider systems to be transformed and parsed to EOHHS systems such as the Data Warehouse, Enterprise Invoice Management/Enterprise Service Management (EIM/ESM) and case management systems thus relieving providers of duplicative data entry into their own EMR and an EOHHS supplied system.

The HL7 Gateway can be built upon the technology of the Virtual Gateway (the EOHHS web portal) by utilizing existing technologies such as the Enterprise Service Bus (ESB). The ESB serves as the core message broker both internally between EOHHS applications and externally with outside applications through the use of an enterprise message model. The message model defines a standard set of messages that the ESB will both transmit and receive. When the ESB receives a message, it identifies the route to the receiving application and provides any message transformation that is needed. The ESB will continue to serve as the hub for electronic exchange of information with HL7 messages being sent to the HL7 Gateway and then parsed and routed to the appropriate application. The ESB in combination with an EOHHS HL7 Gateway will integrate directly with the statewide Health Information Exchange to allow for the appropriate flow of data from the HIE into EOHHS and will form the basis of an HIE "public utility" for all users in the Commonwealth.

As the new and enhanced technologies described in this roadmap are developed, EOHHS will be able to leverage statewide services and initiatives coordinated by the Information Technology Division (ITD) that promote shared infrastructure services, common technical and security standards, and interoperability among agency systems and data where permissible through the use of open standards and federation. Key enterprise services and initiatives are described in more detail in section B.2.2.2 and include (but are not limited to):

- Robust enterprise data centers with consolidated virtual environments to ensure necessary scalability, security, business continuity and disaster recovery
- A statewide broadband network
- A shared application infrastructure

Conclusion

By 2015, as a result of the activities described throughout the SMHP, EOHHS and MassHealth, their members and providers will be connected to and engaged with health information in ways that are simply not possible today. Members will be assured when they go to their doctor's office that their provider will have access to their medical record at the point-of-care, the information is accurate and secure, and the information is up-to-date. MassHealth will be able to measure health outcomes in ways not possible today due to the proliferation of EHRs and the robust development of the "network of networks" necessary to share clinical information throughout the Commonwealth.

The Commonwealth of Massachusetts 2010 Health Information Exchange Strategic and Operational Plan presented by MeHI, and subsequently accepted by ONC, describes that there are multiple sustainable HIEs already functioning in Massachusetts. The expectation going forward is that enough value will be derived by all HIE stakeholders to ensure an on-going sustainable statewide HIE in the Commonwealth, with an appropriate combination of public and private resources to support it after ONC funds have been expended. A key component of the sustainability model will be the inclusion of MassHealth and the ability to access federal matching funds, when available, to support the technical infrastructure required for the Medicaid EHR Incentive Payment Program, but also continues to support other initiatives that are fundamental for the future success of the statewide HIE.

Through the successful implementation of the HIT projects described in this plan, EOHHS will be enhancing the technical backbone that is required for enabling participation in a robust statewide HIE. The projects identified in the SMHP leverage existing infrastructure and develop new interfaces in an attempt to minimize duplication of efforts and maximize cost effectiveness. In addition, the implementation of the statewide HIE will be one of the pathways to enable the successful implementation of other long-term statewide healthcare initiatives such as the Affordable Care Act.

Successfully completing the projects described in the SMHP will have profound impacts on the Medicaid program and all those who interact with it. However, Massachusetts recognizes the Medicaid EHR Incentive Payment Program is an important component of a much larger vision for Statewide HIE and HIT. The Commonwealth thinks of the SMHP and its activities as an essential building block that will prepare providers throughout the State to become meaningful users of EHR technology, improve service delivery, and enable sharing of healthcare information across the statewide HIE to help inform decision making and improve healthcare outcomes for all of the Commonwealth's Medicaid members.

Appendix A: Glossary of Terms and Abbreviations

The following table contains a list of commonly used terms, acronyms and abbreviations related to the project.

Common Terms, Acronyms, and Abbreviations	
Term/Acronym/Abbreviation	**Definition/Explanation**
A/I/U	Adopt, Implement, Upgrade
ALOS	Average Length of Stay
APCD	All Payer Claims Database
ARRA	American Recovery and Reinvestment Act of 2009
BDMP	Berry, Dunn, McNeil & Parker
BORID	Massachusetts Board of Registration in Dentistry
BORIM	Board of Registration in Medicine
CACIM	Cross Agency Client Identification and Matching
CCHIT	Certification Commission for Health IT
CCN	The Centers for Medicare & Medicaid Services Certification Number
Chapter 305	Massachusetts state law that promotes cost containment, transparency and efficiency in the delivery of quality health care, and includes a goal to implement Electronic Health Records (EHR) in all provider settings by the end of 2014.
CHC	Community Health Centers - health centers spread across the United States that provides comprehensive primary care to 20 million Americans with limited financial resources.
CHIPRA	Children's Health Insurance Program Re-Authorization Act
CMS	Centers for Medicare and Medicaid Services
CMS R&A System	Centers for Medicare and Medicaid Services Registration and Attestation System
CPE	Continuing Professional Education
CQM	Clinical Quality Measure
CRM	Clinical Relationship Manager - responsible for assisting Massachusetts eHealth Institute (MeHI) with developing relationships with providers and their practices in order to successfully implement Health Information Technology (Health IT) and meet the requirements of the Regional Extension Center (REC).
CST	Customer Service Team
DPH	Department of Public Health
EDI	Electronic Data Interchange - structured transmission of data between organizations by electronic means
EFT	Electronic Funds Transfer

Common Terms, Acronyms, and Abbreviations	
Term/Acronym/Abbreviation	**Definition/Explanation**
EHR	Electronic Health Record
EHR IP	Electronic Health Record Incentive Program
EIN	Employer Identification Number
EMR	Electronic Medical Record
EOHHS	The Massachusetts Executive Office of Health and Human Services
EP	Eligible Provider
ETRM	Enterprise Technical Reference Model
FFP	Federal Financial Participation
FQHC	Federally Qualified Health Center
HCFA	Healthcare Financing Administration
HCFP	Division of Healthcare Finance and Policy
HCQCC	Health Care Quality and Cost Council
HEDIS	Healthcare Effectiveness Data and Information Set
HIE	Health Information Exchange - as defined by the Office of the National Coordinator and the National Alliance for Health Information Technology (NAHIT), Health Information Exchange refers to the electronic movement of health-related information among organizations according to nationally recognized standards.
HIE Plan	The Commonwealth of Massachusetts 2010 Health Information Exchange Strategic and Operational Plan
HIPAA	Health Insurance Portability and Accountability Act of 1996
HIPSC	Health Information Security and Privacy Collaboration
HIT	Health Information Technology
HIT P-APD	Health Information Technology Planning Advanced Planning Document
HIT Plan	The Commonwealth of Massachusetts 2010 HIT Strategic Plan
HITECH	Health Information for Economic and Clinical Health – collectively refers to the health information technology provisions included at Title XIII of Division A and Title IV of Division B of the ARRA.
HP	Hewlett Packard – MAPIR vendor
IOO	Implementation Optimization Organizations – a group of organizations such as vendors, consultants, or other private organizations that are responsible for deploying EHRs and the statewide HIE.
IP	Incentive Payment
ISA	Interagency Services Agreement
ITIF	Information Technology & Innovation Foundation
MAPIR	Medical Assistance Provider Incentive Repository – web based application that will support CMS R&A interfaces and data exchanges and state requirements for

Common Terms, Acronyms, and Abbreviations	
Term/Acronym/Abbreviation	**Definition/Explanation**
	determining and issuing eligible provider incentive payments.
MBI	Massachusetts Broadband Institute
MeHI	Massachusetts eHealth Institute. MeHI is a division of the Massachusetts Technology Collaborative. MeHI is responsible for advancing the dissemination of health information technology across the Commonwealth. MeHI's will advance health information technology via three separate programs: • MeHI/REC (Regional Extension Center) Program - provides oversight of the IOOs and EHR vendors to ensure conformance with State (including Chapter 305) and Federal Law in the Statewide implementation of electronic health records. • MeHI/HIE (Health Information Exchange) Program - provides administration of the ONC Cooperative Agreement funds and to ensure the effective implementation of the Statewide HIE. MeHI/HIE will procure and contract with vendors to deploy and operate the Statewide HIE services. • MeHI Enrollment, Validation and Outreach Team (EVOT) - provides enrollment, validation, and outreach support services to providers.
MHQP	Massachusetts Health Quality Partners
MITA	Medicaid Information Technology Architecture - an IT initiative intended to stimulate an integrated business and IT transformation affecting the Medicaid enterprise in all States. The MITA initiative's intention is to improve Medicaid program administration by establishing national guidelines for technologies and processes.
MMARS	Massachusetts Management Accounting and Reporting System
MMIS	Medicaid Management Information System
MPI	Master Patient Index – an index of patients, persons, members of healthcare plans, guarantors, physicians, healthcare plans, and more. It is a listing of healthcare related entities and people.
MTC	Massachusetts Technology Collaborative
MU	Meaningful Use – as defined in the federal Final Rule (issued in July 2010), Stage 1 meaningful use has three main components: 1. Certified use of an EHR in a "meaningful" way, such as prescribing; 2. Certified use of an EHR technology for electronic exchange of information to improve quality of health care; and 3. The use of certified EHR technology to submit clinical quality and other measures.
NASMD	National Association of State Medicaid Directors
NeHC	National E-Health Collaborative
NEHEN	New England Healthcare EDI Network
New MMIS	MassHealth Management Information System
NPI	National Provider Identifier
NPRM	Notice of Proposed Rule Making

Common Terms, Acronyms, and Abbreviations	
Term/Acronym/Abbreviation	**Definition/Explanation**
OIG	Office of the Inspector General
OMB	Office of Management & Budget
ONC	Office of the National Coordinator of Health Information Technology
PACE	Program of All-Inclusive Care for the Elderly
PCMH	Patient Centered Medical Home
PCU	Provider Compliance Unit
PECOS	The Provider Enrollment, Chain and Ownership System database run by CMS
PHI	Protected Health Information
PIP	Physician Incentive Plan
POSC	Provider On-Line Service Center
PPACA	Patient Protection and Affordable Care Act
REC (or RHITEC)	Regional Extension Center - as set out in the ARRA, Regional Extension Centers will be created by ONC to provide technical assistance and disseminate best practices and other information learned from the Health Information Technology Research Center to aid health care providers with the adoption of health information technology.
RHC	Regional Health Center
SCIO	Secretariat Chief Information Officer
SCO	Senior Care Options
SLA	Service Level Agreement
SMHP	State Medicaid Health Information Technology Plan
SOA	Service Oriented Architecture
The Plan	The Statewide Health Information Technology Plan
TIN	Tax Identification Number
VG	Virtual Gateway

ID	CMS SMHP Requirement	Source	SMHP Section Reference
A.1	1. What is the current extent of EHR adoption by practitioners and by hospitals? How recent is this data? Does it provide specificity about the types of EHRs in use by the State's providers? Is it specific to just Medicaid or an assessment of overall statewide use of EHRs? Does the SMA have data or estimates on eligible providers broken out by types of provider? Does the SMA have data on EHR adoption by types of provider (e.g. children's hospitals, acute care hospitals, pediatricians, nurse practitioners, etc.)?	CMS Template 4/27/10	Section A.6.2 (Provider Survey) and Appendix D (Provider Survey Results)
A.2	2. To what extent does broadband internet access pose a challenge to HIT/E in the State's rural areas? Did the State receive any broadband grants?	CMS Template 4/27/10	Section A.4.3 (Broadband Access)
A.3	3. Does the State have Federally-Qualified Health Center networks that have received or are receiving HIT/EHR funding from the Health Resources Services Administration (HRSA)? Please describe.	CMS Template 4/27/10	Section A.3.1 (HIT-Related Transformation)
A.4	4. Does the State have Veterans Administration or Indian Health Service clinical facilities that are operating EHRs? Please describe.	CMS Template 4/27/10	Section A.6.1 (Stakeholder/Provider Interviews for SMHP) and Appendix E (Provider Meeting Notes)
A.5	5. What stakeholders are engaged in any existing HIT/E activities and how would the extent of their involvement be characterized?	CMS Template 4/27/10	Section A.5 (HIT/HIE Engaged Stakeholders)
A.6	6. * Does the SMA have HIT/E relationships with other entities? If so, what is the nature (governance, fiscal, geographic scope, etc) of these activities?	CMS Template 4/27/10	Section A.2.1 (Governance Structure)
A.7	7. Specifically, if there are health information exchange organizations in the State, what is their governance structure and is the SMA involved? ** How extensive is their geographic reach and scope of participation?	CMS Template 4/27/10	Section A.2.2 (Massachusetts Health Information Exchange)
A.8	8. Please describe the role of the MMIS in the SMA's current HIT/E environment. Has the State coordinated their HIT Plan with their MITA transition plans and if so, briefly describe how.	CMS Template 4/27/10	Section A.3.4 (Medicaid Enterprise) and Section A.3.5 Medicaid Information Technology Architecture (MITA) SS-A

ID	CMS SMHP Requirement	Source	SMHP Section Reference
A.9	9. What State activities are currently underway or in the planning phase to facilitate HIE and EHR adoption? What role does the SMA play? Who else is currently involved? For example, how are the regional extension centers (RECs) assisting Medicaid eligible providers to implement EHR systems and achieve meaningful use?	CMS Template 4/27/10	Section A.2.1 (Governance Structure) and A.4.1 (Facilitation of EHR Adoption)
A.10	10. Explain the SMA's relationship to the State HIT Coordinator and how the activities planned under the ONC-funded HIE cooperative agreement and the Regional Extension Centers (and Local Extension Centers, if applicable) would help support the administration of the EHR Incentive Program.	CMS Template 4/27/10	Section A.5.1 Relationships with HIT Coordinator
A.11	11. What other activities does the SMA currently have underway that will likely influence the direction of the EHR Incentive Program over the next five years?	CMS Template 4/27/10	Section 3.6 (All-Payer Claims Database) and Section A.3.8 (Immunization Registry Interoperability with Public Health Surveillance)
A.12	12. Have there been any recent changes (of a significant degree) to State laws or regulations that might affect the implementation of the EHR Incentive Program? Please describe.	CMS Template 4/27/10	Section A.4.3 (State Law or Regulation that Impact EHR Incentives)
A.13	13. Are there any HIT/E activities that cross State borders? Is there significant crossing of State lines for accessing health care services by Medicaid beneficiaries? Please describe.	CMS Template 4/27/10	Section A.3.3 (HIT/HIE Activities across State Boarders)
A.14	14. What is the current interoperability status of the State Immunization registry and Public Health Surveillance reporting database(s)?	CMS Template 4/27/10	Section A.3.8 (Immunization Registry Interoperability with Public Health Surveillance)

ID	CMS SMHP Requirement	Source	SMHP Section Reference
A.15	15. If the State was awarded an HIT-related grant, such as a Transformation Grant or a CHIPRA HIT grant, please include a brief description.	CMS Template 4/27/10	Section A.3.2 (CHIPRA Grant Status and Robert Wood Johnson Foundation Enrollment Initiative) and Section A.1 (The Executive Offices of Health and Human Services; MassHealth) and Section 2.2 (Massachusetts Health Information Exchange)
A.16	We expect that States will describe proposed health IT projects as well as their ‘‘as is’’ landscapes using MITA concepts and principles. We intend to evaluate States' proposed strategies and plans for development of Medicaid health information exchange and interoperable health IT using these MITA principles, as applicable. These strategies and plans must be included in the State Medicaid Health Information Technology Plan (SMHP), a term discussed below.	Final Rule, p. 44509	A.3.5 Medicaid Information Technology Architecture (MITA) SS-A and Section A.3 (HIT Landscape) and Section 2.2 (Massachusetts Health Information Exchange)
A.17	We therefore clarify our proposed policy. States must include in their State Medicaid HIT Plans an environmental scan of existing HIT and quality measure reporting activities related to Medicaid. We expect States to include details in their SMHP about how these other on-going efforts can be leveraged and supported under HITECH; and how HITECH will not result in duplicative and/or burdensome reporting requirements on the same providers or organizations.	Final Rule, p. 44432	Section A.6 (Environmental Scan)
A.18	A description of how intrastate systems, including the Medicaid Management Information System (MMIS) and other automated mechanized claims processing and information retrieval systems— (i) Have been considered in developing a HIT solution; and	Final Rule, p. 44510	Section A.3.3 HIT/HIE Activities across State Borders

ID	CMS SMHP Requirement	Source	SMHP Section Reference
A.19	A description of data-sharing components of HIT solutions.	Final Rule, p. 44510	Section A.3.4 Medicaid Enterprise
A. 20	A description of how each State will promote secure data exchange, where permissible under the Health Insurance Portability and Accountability Act (HIPAA) and other requirements included in ARRA.	Final Rule, p. 44582	Section A.3.9.2 NewMMIS Standards and section A.3.9.3 Massachusetts Standards
A. 21	A description of how each State will promote the use of data and technical standards to enhance data consistency and data sharing through common data-access mechanisms.	Final Rule, p. 44582	Section A.3.4 Medicaid Enterprise
A. 22	A description of how each State will adopt national data standards for health and data exchange and open standards for technical solutions as they become available.	Final Rule, p. 44582	Section A.2.2 Massachusetts Health Information Exchange (HIE) and Section A.3.4 Medicaid Enterprise
	* May be deferred.		
	** The first part of this question may be deferred but States do need to include a description of their HIE(s)' geographic reach and current level of participation.		

ID	CMS SMHP Requirement	Source	SMHP Section Reference
B. 1.	1. Looking forward to the next five years, what specific HIT/E goals and objectives does the SMA expect to achieve? Be as specific as possible; e.g., the percentage of eligible providers adopting and meaningfully using certified EHR technology, the extent of access to HIE, etc.	CMS Template 4/27/10	Sections B.2.1 (Vision in Action) and B.2.2 (SMHP Goals and Objectives)
B. 2.	2. *What will the SMA's IT system architecture (potentially including the MMIS) look like in five years to support achieving the SMA's long term goals and objectives? Internet portals? Enterprise Service Bus? Master Patient Index? Record Locater Service?	CMS Template 4/27/10	Sections B.2.1 (Vision in Action), B.2.2.2 (IT Architecture), and B.2.2.3 (Medicaid Information Technology Architecture State Self-Assessment)
B. 3.	3. How will Medicaid providers interface with the SMA IT system as it relates to the EHR Incentive Program (registration, reporting of MU data, etc.)?	CMS Template 4/27/10	Sections B.2.2.7 (EHR Activities During the Next Twelve Months) and C (Activities Necessary to Administer the EHR-IP)
B. 4.	4. Given what is known about HIE governance structures currently in place, what should be in place by 5 years from now in order to achieve the SMA's HIT/E goals and objectives? While we do not expect the SMA to know the specific organizations will be involved, etc., we would appreciate a discussion of this in the context of what is missing today that would need to be in place five years from now to ensure EHR adoption and meaningful use of EHR technologies.	CMS Template 4/27/10	Sections B.2.2.6 (Future Governance) and B.2.2.4 (Governance Model)
B. 5.	5. What specific steps is the SMA planning to take in the next 12 months to encourage provider adoption of certified EHR technology?	CMS Template 4/27/10	Table B.2.1 and Sections E.2.1.4.4 (Timeline for Implementing SMHP HIT Projects), E.2.2 (Graphical Pathway), and E.2.3 (Benchmarks - *inclusive of subsections*)
B. 6.	6. ** If the State has FQHCs with HRSA HIT/EHR funding, how will those resources and experiences be leveraged by the SMA to encourage EHR adoption?	CMS Template 4/27/10	Section C.2.6 (Business Process Activities)

ID	CMS SMHP Requirement	Source	SMHP Section Reference
B. 7.	7. ** How will the SMA assess and/or provide technical assistance to Medicaid providers around adoption and meaningful use of certified EHR technology?	CMS Template 4/27/10	Sections B.1.1 (MassHealth and MeHI Collaboration - inclusive of subsections) and E.2.6 (Steps for Support Provider Adoption of Certified EHR Technologies)
B. 8.	8. ** How will the SMA assure that populations with unique needs, such as children, are appropriately addressed by the EHR Incentive Program?	CMS Template 4/27/10	Section A.3.2 (CHIPRA Grant Status and Robert Wood Johnson Foundation Enrollment Initiative)
B. 9.	9. If the State included in a description of a HIT-related grant award (or awards) in Section A, to the extent known, how will that grant, or grants, be leveraged for implementing the EHR Incentive Program, e.g. actual grant products, knowledge/lessons learned, stakeholder relationships, governance structures, legal/consent policies and agreements, etc.?	CMS Template 4/27/10	Section A.4 (Factors Related to EHR Adoption - *inclusive of subsections*)
B.10.	10. Does the SMA anticipate the need for new or State legislation or changes to existing State laws in order to implement the EHR Incentive Program and/or facilitate a successful EHR Incentive Program (e.g. State laws that may restrict the exchange of certain kinds of health information)? Please describe.	CMS Template 4/27/10	Section B.2.2.8 (State Law)
	Please include other issues that the SMA believes need to be addressed, institutions that will need to be present and interoperability arrangements that will need to exist in the next five years to achieve its goals.	CMS Template 4/27/10	Sections B.2.1.1 (Virtual Patient Centered Medical Home), B.2.1.2 (Care Coordination), B.2.1.3 (Quality Reporting), B.2.1.4 (Administrative Simplification), and B.3 (Stakeholder Engagement Process)
	* This question may be deferred if the timing of the submission of the SMHP does not accord with when the long-term vision for the Medicaid IT system is decided. It would be helpful though to note if plans are known to include any of the listed functional business processes.		
	** May be deferred.		

Activities Necessary to Administer and Oversee the EHR Incentive Payment Program

ID	CMS SMHP Requirement	Source	SMHP Section Reference
C.1	1. How will the SMA verify that providers are not sanctioned, are properly licensed/qualified providers?	CMS Template 4/27/10	Section C.2.6 (Business Process Activities)
C.2	2. How will the SMA verify whether EPs are hospital-based or not?	CMS Template 4/27/10	Section C.2.6 (Business Process Activities)
C.3	3. How will the SMA verify the overall content of provider attestations?	CMS Template 4/27/10	Section C.2.6 (Business Process Activities)
C.4	4. How will the SMA communicate to its providers regarding their eligibility, payments, etc?	CMS Template 4/27/10	Section C.2.6 C.2.6 (Business Process Activities)
C.5	5. What methodology will the SMA use to calculate patient volume?	CMS Template 4/27/10	Sections C.2.6 (Business Process Activities) and D.2 (Provider Post-payment Audit and Monitoring)
C.6	6. What data sources will the SMA use to verify patient volume for EPs and acute care hospitals?	CMS Template 4/27/10	Sections C.2.6 (Business Process Activities) and D.2 (Provider Post-payment Audit and Monitoring)
C.7	7. How will the SMA verify that EPs at FQHC/RHCs meet the practices predominately requirement?	CMS Template 4/27/10	Section C.2.6 (Business Process Activities)
C.8	6. How will the SMA verify *adopt, implement or upgrade* of certified electronic health record technology by providers?	CMS Template 4/27/10	Sections C.2.6 (Business Process Activities) and D.2 (Provider Post-payment Audit and Monitoring)
C.9	7. How will the SMA verify *meaningful use* of certified electronic health record technology for providers' second participation years?	CMS Template 4/27/10	Section D.2 (Provider Post-payment Audit and Monitoring)
C.10	8. Will the SMA be proposing any changes to the MU definition as permissible per rule-making? If so, please provide details on the expected benefit to the Medicaid population as well as how the SMA assessed the issue of additional provider reporting and financial burden.	CMS Template 4/27/10	Massachusetts is not proposing changes to the MU definition.
C.11	9. How will the SMA verify providers' use of *certified electronic health record technology*?	CMS Template 4/27/10	Section D.2 (Provider Post-payment Audit and Monitoring)

ID	CMS SMHP Requirement	Source	SMHP Section Reference
C.12	10. How will the SMA collect providers' meaningful use data, including the reporting of clinical quality measures? Does the State envision different approaches for the short-term and a different approach for the longer-term?	CMS Template 4/27/10	Sections D.4.2 (Federal Reporting) and E.2.1.4.2 (SMHP HIT Project Summaries)
C.13	11. * How will this data collection and analysis process align with the collection of other clinical quality measures data, such as CHIPRA?	CMS Template 4/27/10	Section A.3.2 (CHIPRA Grant Status and Robert Wood Johnson Foundation Enrollment Initiative)
C.14	12. What IT, fiscal and communication systems will be used to implement the EHR Incentive Program?	CMS Template 4/27/10	Sections A.3.3.2 (Medical Assistance Provider Incentive Repository Multi-State Collaborative), A.3.4 (Medicaid Enterprise) and C.1.7 (Methods of Communication)
C.15	13. What IT systems changes are needed by the SMA to implement the EHR Incentive Program?	CMS Template 4/27/10	Section E.1.1 (Key Tasks and Activities for 2011)
C.16	14. What is the SMA's IT timeframe for systems modifications?	CMS Template 4/27/10	Section E.1.1 (Key Tasks and Activities for 2011)
C.17	15. When does the SMA anticipate being ready to test an interface with the CMS National Level Repository (NLR)?	CMS Template 4/27/10	Section E.1.1 (Key Tasks and Activities for 2011)
C.18	16. What is the SMA's plan for accepting the registration data for its Medicaid providers from the CMS NLR (e.g. mainframe to mainframe interface or another means)?	CMS Template 4/27/10	Section A.3.3.2 (Medical Assistance Provider Incentive Repository Multi-State Collaborative)
C.19	17. What kind of website will the SMA host for Medicaid providers for enrollment, program information, etc?	CMS Template 4/27/10	Sections A.3.4 (Medicaid Enterprise) and C.1.7 (Methods of Communication)
C.20	18. Does the SMA anticipate modifications to the MMIS and if so, when does the SMA anticipate submitting an MMIS I-APD?	CMS Template 4/27/10	Section E.1.1 (Key Tasks and Activities for 2011) and with IAPD submission in May 2011

ID	CMS SMHP Requirement	Source	SMHP Section Reference
C.21	19. What kinds of call centers/help desks and other means will be established to address EP and hospital questions regarding the incentive program?	CMS Template 4/27/10	Section C.1.3 (Core Strategies for Provider Outreach and Education) and C.1.7 (Methods of Communication)
C.22	20. What will the SMA establish as a provider appeal process relative to: a) the incentive payments, b) provider eligibility determinations, and c) demonstration of efforts to adopt, implement or upgrade and meaningful use certified EHR technology?	CMS Template 4/27/10	Section C.4 (Reconsideration and Provider Appeals)
C.23	21. What will be the process to assure that all Federal funding, both for the 100 percent incentive payments, as well as the 90 percent HIT Administrative match, are accounted for separately for the HITECH provisions and not reported in a commingled manner with the enhanced MMIS FFP?	CMS Template 4/27/10	Section D.4.1 (Federal Claiming)
C.24	22. What is the SMA's anticipated frequency for making the EHR Incentive payments (e.g. monthly, semi-monthly, etc.)?	CMS Template 4/27/10	Section C.3.6 (Business Process Activities)
C.25	22. What will be the process to assure that Medicaid provider payments are paid directly to the provider (or an employer or facility to which the provider has assigned payments) without any deduction or rebate?	CMS Template 4/27/10	Section C.3.6 (Business Process Activities)
C.26	23. What will be the process to assure that Medicaid payments go to an entity promoting the adoption of certified EHR technology, as designated by the state and approved by the US DHHS Secretary, are made only if participation in such a payment arrangement is voluntary by the EP and that no more than 5 percent of such payments is retained for costs unrelated to EHR technology adoption?	CMS Template 4/27/10	Sections C.2.6 (Business Process Activities - Provider Enrollment and Eligibility Verification) , C.3.2 (Predecessor Activity - Payment Processing), C.3.6 (Business Process Activities - Payment Processing) and D.2 (Provider Post-payment Audit and Monitoring)

ID	CMS SMHP Requirement	Source	SMHP Section Reference
C.27	24. What will be the process to assure that there are fiscal arrangements with providers to disburse incentive payments through Medicaid managed care plans does not exceed 105 percent of the capitation rate per 42 CFR Part 438.6, as well as a methodology for verifying such information?	CMS Template 4/27/10	Sections C.3.2 (Predecessor Activity - Payment Processing), C.3.6 (Business Process Activities - Payment Processing) and D.2 (Provider Post-payment Audit and Monitoring)
C.28	*25.* What will be the process to assure that all hospital calculations and EP payment incentives (including tracking EPs' 15% of the net average allowable costs of certified EHR technology) are made consistent with the Statute and regulation?	CMS Template 4/27/10	15% NAAC IS NO LONGER REQUIRED PER CMS CALL ON 12/28/10
C.29	*26.* What will be the role of existing SMA contractors in implementing the EHR Incentive Program – such as MMIS, PBM, fiscal agent, managed care contractors, etc.?	CMS Template 4/27/10	Sections A.3.4, C.1.7 and C.1.8
C.30	27. States should explicitly describe what their assumptions are, and where the path and timing of their plans have dependencies based upon: - The role of CMS (NLR; provider Outreach and support) - The status/availability of certified EHR technology. - The role, approved plans and status of the REC. - The role, approved plans and status of the HIE cooperative agreements. - State specific readiness factors.	CMS Template 4/27/10	Section A.2.2 (Massachusetts Health Information Exchange), Section A.5 (HIT/HIE Engaged Stakeholders), Section B.1.1 (MassHealth and MeHI Collaboration)
C.31	1. Additionally, as stated previously in this final rule, we have revised the rule to include a requirement that the SMHP must describe the process in place and the methodology for verifying that eligible professionals meet their responsibility for 15 percent of the net average allowable cost for certified EHR technology. 2. The SMHP should include information about how States will validate the patient volume consistent with the menu of options listed in § 495.306.	Final Rule, p. 44510	1. 15% NAAC is no longer required per CMS call on 12/28/2010. 2. A.3.6 (All Payer Claims Database).
C.32	CMS has included changes to the SMHP requirements for the patient volume requirement in § 495.302, § 495.306, and § 495.332. These changes are discussed under the patient volume section of this final rule. We note that States that wish to offer an alternative for estimating patient volume would be required to involve key stakeholders in the determination of such alternative.	Final Rule, p. 44510 & 44488	Section C.2.6 (Business Process Activities - Provider Enrollment and Eligibility Verification)

ID	CMS SMHP Requirement	Source	SMHP Section Reference
C.33	Eligible provider types must be specified in a State's SMHP.	Final Rule, p. 44490	Section C.2.5 (Business Process Description - Provider Enrollment and Eligibility Verification)
C.34	States must provide CMS with details about how their implementation of the EHR incentive program will address Federal and State privacy laws and how all data will be secured in the SMHP.	Final Rule, p. 44515	Section A.3.4 (Medicaid Enterprise) and A.3.9 (Security and Data Standards)
C.35	States will be required to outline in the SMHP the process for ''looking behind'' provider attestations and the demonstration of meaningful use including any record retention requirements.	Final Rule, p. 44515	Section C.2.6 (Business Process Activities - Provider Enrollment and Eligibility Verification)
C.36	The role of CMS (e.g. the development and support of the National Level Repository; provider outreach/help desk support)	CMS Template 4/27/10	Section C.1.4.4 (Centers for Medicare & Medicaid Services (CMS))
C.37	The status/availability of certified EHR technology	CMS Template 4/27/10	Section C.1.4.2 (Massachusetts e-Health Institute (MeHI))
C.38	The role, approved plans and status of the Regional Extension Centers	CMS Template 4/27/10	Sections A.4.1 (Facilitation of EHR Adoption) and C.1.4.2 (Massachusetts e-Health Institute (MeHI))
C.39	The role, approved plans and status of the HIE cooperative agreements	CMS Template 4/27/10	Section A.2.1 (Governance Structure) and A.4.1 (Facilitation of EHR Adoption)
C.40	State-specific readiness factors	CMS Template 4/27/10	Sections C.1.4.2 (Massachusetts e-Health Institute (MeHI)) and E.1.1 (Key Tasks and Activities for 2011)
	*May be deferred		

ID	CMS SMHP Requirement	Source	SMHP Section Reference
D.1	1. Describe the methods the SMA will employ to identify suspected fraud and abuse, including noting if contractors will be used. Please identify what audit elements will be addressed through pre-payment controls or other methods and which audit elements will be addressed post-payment.	CMS Template 4/27/10	Section D.2 (Provider Post-payment Audit and Monitoring) and D.3 (Preventing and Detecting Fraud and Abuse)
D.2	2. How will the SMA track the total dollar amount of overpayments identified by the State as a result of oversight activities conducted during the FFY?	CMS Template 4/27/10	Section D.3 (Preventing and Detecting Fraud and Abuse)
D.3	3. Describe the actions the SMA will take when fraud and abuse is detected.	CMS Template 4/27/10	Section D.3 (Preventing and Detecting Fraud and Abuse)
D.4	4. Is the SMA planning to leverage existing data sources to verify meaningful use (e.g. HIEs, pharmacy hubs, immunization registries, public health surveillance databases, etc.)? Please describe.	CMS Template 4/27/10	Section D.2 (Provider Post-payment Audit and Monitoring)
D.5	5. Will the state be using sampling as part of audit strategy? If yes, what sampling methodology will be performed?* (i.e. probe sampling; random sampling)	CMS Template 4/27/10	Section D.2 (Provider Post-payment Audit and Monitoring)
D.6	6. **What methods will the SMA use to reduce provider burden and maintain integrity and efficacy of oversight process (e.g. above examples about leveraging existing data sources, piggy-backing on existing audit mechanisms/activities, etc)?	CMS Template 4/27/10	Section D.1 (Program Monitoring and Oversight), D.2 (Provider Post-payment Audit and Monitoring) and D.3 (Preventing and Detecting Fraud and Abuse)

ID	CMS SMHP Requirement	Source	SMHP Section Reference
D.7	7. Where are program integrity operations located within the State Medicaid Agency, and how will responsibility for EHR incentive payment oversight be allocated?	CMS Template 4/27/10	Section D.1 (Program Monitoring and Oversight), D.2 (Provider Post-payment Audit and Monitoring) and D.3 (Preventing and Detecting Fraud and Abuse)
D.8	What will be the SMA's methods to be used to avoid making improper payments? (Timing, selection of which audit elements to examine pre or post-payment, use of proxy data, sampling, how the SMA will decide to focus audit efforts etc):	CMS Template 4/27/10	Section D.2 (Provider Post-payment Audit and Monitoring)
D.9	States must describe their auditable data sources in their SMHP and submit to CMS for review and approval.	Final Rule, p. 44500	Section D.2 (Provider Post-payment Audit and Monitoring)
	* The sampling methodology part of this question may be deferred until the State has formulated a methodology based upon the size of their EHR incentive payment recipient universe.		
	** May be deferred		

ID	CMS SMHP Requirement	Source	SMHP Section Reference
E.1.a	*Provide CMS with a graphical as well as narrative pathway that clearly shows where the SMA is starting from (As-Is) today, where it expects to be five years from now (To-Be), and how it plans to get there.	CMS Template 4/27/10	Section E.2.1 (Narrative Pathway), Section E.2.2 (Graphical Pathway)
E.1.b	CMS is looking for a strategic plan and the tactical steps that SMAs will be taking or will take successfully implement the EHR Incentive Program and its related HIT/E goals and objectives.	CMS Template 4/27/10	Section E.2.1.4.2 (SMHP HIT Project Summaries)
E.1.c	We are specifically interested in those activities SMAs will be taking to make the incentive payments to its providers, and the steps they will use to monitor provider eligibility including meaningful use.	CMS Template 4/27/10	Section E.2.4 (The Steps to Make Incentive Payments to Providers) and Section E.2.5 (Steps to Monitor Provider Eligibility and Meaningful Use).
E.1.d	We also are interested in the steps SMAs plan to take to support provider adoption of certified EHR technologies.	CMS Template 4/27/10	Section E.2.6 (Steps to Support Provider Adoption of Certified EHR Technologies)
E.1.e	We would like to see the SMA's plan for how to leverage existing infrastructure and/or build new infrastructure to foster HIE between Medicaid's trading partners within the State, with other States in the area where Medicaid clients also receive care, and with any Federal providers and/or partners.	CMS Template 4/27/10	Section E.2 (Five-Year Strategic Plan), Section E.2.1.1 (Current Environment).
E.2	What are the SMA's expectations re provider EHR technology adoption over time? Annual benchmarks by provider type?	CMS Template 4/27/10	Section E.2.3.2 (Expectations Regarding Provider EHR Technology Adoption over Time and Annual EHR Benchmarks by Provider Type) and E.2.6.3 (Expectations Regarding Provider Participation in EHR-IP)
E.3	Describe the annual benchmarks for each of the SMA's goals that will serve as clearly measurable indicators of progress along this scenario.	CMS Template 4/27/10	E.2.3.1 (Benchmarks for Goals)
E.4	Discuss annual benchmarks for audit and oversight activities.	CMS Template 4/27/10	E.2.3.3 (Benchmarks for Audit and Oversight Activities)

ID	CMS SMHP Requirement	Source	SMHP Section Reference
E.5	CMS is looking for a strategic plan and the tactical steps that SMAs will be taking or will take successfully implement the EHR Incentive Program and its related HIT/E goals and objectives. We are specifically interested in those activities SMAs will be taking to make the incentive payments to its providers, and the steps they will use to monitor provider eligibility including meaningful use. We also are interested in the steps SMAs plan to take to support provider adoption of certified EHR technologies. We would like to see the SMA's plan for how to leverage existing infrastructure and/or build new infrastructure to foster HIE between Medicaid's trading partners within the State, with other States in the area where Medicaid clients also receive care, and with any Federal providers and/or partners.	CMS Template 4/27/10	See above.
	* Where the State is deferring some of its longer-term planning and benchmark development for HIT/E in order to focus on the immediate implementation needs around the EHR Incentive Program, please clearly note which areas are still under development in the SMA's HIT Roadmap and will be deferred.		

Appendix C: Provider Survey Questions

This Appendix provides a copy of the questions asked by MTC during the survey of providers. The results of this survey were utilized to develop an understanding of the State's EHR adoption rates and anticipated challenges with the EHR-IP.

Qualtrics Survey Software 10/13/10 9:31 AM

massachusetts eHEALTH institute
A Division of the Massachusetts Technology Collaborative

Block 1

Thank you for participating in this important survey. Please be assured that all of your responses will be kept confidential. Again, the survey should take no more than 5 or 6 minutes to complete.

EHR Survey Team

Do providers in your office treat patients enrolled in Medicaid (MassHealth) and/or Medicaid Managed Care Plans?

- Yes
- No

Do you provide at least 50% of your services at a Federally Qualified Health Center (FQHC) or Rural Health Center (RHC)?

- Yes
- No
- Not sure

Do you provide 30% or more of your services to Needy Individuals (definition of Needy Individuals - (1) they are receiving medical assistance from Medicaid or the Children's Health Insurance Program (CHIP); (2) they are furnished uncompensated care by the provider; or (3) they are furnished services at either no cost or reduced cost based on a sliding scale determined by the individual's ability to pay).

- Yes
- No
- Not sure

Do you provide 90% or more of your services in either an inpatient setting or emergency department setting?

- Yes
- No
- Not sure

Do you think 30% or more of your total patient encounters (or 20% if you are a pediatrician) are from Medicaid patients?

https://new.qualtrics.com/ControlPanel/PopUp.php?PopType=SurveyPrintPreview&WID=_blank Page 1 of 8

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- Yes
- No
- Not sure

Which of the following describes the care provided by your organization?

- Primary Care Solo Practice
- Specialty Care Solo Practice
- Primary Care Group Practice or Partnership
- Single Specialty Group Practice or Partnership
- Multi-Specialty Group Practice or Partnership
- Community Health Care Center (FQHC, RHC, etc.)
- Dental Practice
- Other - Please explain

Block 2

Indicate the number of healthcare professionals involved in patient care (e.g. Physicians, Dentists, certified Nurse Midwives, Nurse Practitioners, and Physician Assistants) in your practice:

- 1-3
- 4-10
- 11-20
- 21-50
- 51-100
- 100 or more
- Not sure

Block 3

Default Question Block

Which of the following categories best describes you?

- Office Manager/Practice Administrator
- MD
- Dentist
- Nurse Practitioner
- Certified Nurse Midwife
- Physician Assistant
- Other

https://new.qualtrics.com/ControlPanel/PopUp.php?PopType=SurveyPrintPreview&WID=_blank Page 2 of 8

If you are a dentist or if you are responding on behalf of a dentist, please indicate your specialty. Please mark all that apply.

- General Dentistry
- Oral Surgery
- Endodontics
- Pedodontics
- Periodontics
- Prosthodontics
- Geriatric Dentistry
- Pediatric Dentistry
- Orthodontics
- Other

If you are an MD or if you are responding on behalf of a physician, please indicate your specialty. Please mark all that apply.

- Pediatrician
- Internist
- Family/General Practitioner
- Allergist
- Cardiologist
- Dermatologist
- Endocrinologist
- Gastroenterologist
- Geriatrician
- Gynecologist
- Hematologist
- Neurologist
- Obstetrician
- Oncologist
- Orthopedist
- Ophthalmologist
- Psychiatrist
- Radiologist
- Surgeon
- Urologist
- Other

During a typical day in which you are providing patient care, how often do you use a computer to look up a patient's medical information?

- Always
- Usually
- Sometimes
- Rarely
- Never

How would you describe your practice's adoption of Electronic Health Record, or EHR, technology?

Note: EHR is defined as an electronic record of health-related information on an individual that conforms to nationally recognized interoperability standards and that can be created, managed, and consulted by authorized clinicians and staff across more than one health care organization.

- We currently use EHR technology
- We are in the process of adopting EHR technology
- We're planning to adopt EHR technology in 1-2 years
- We're planning to adopt EHR technology in 3-5 years
- We have no plans to adopt EHR technology

How would you describe your overall level of satisfaction with your EHR technology?

- Very satisfied
- Somewhat satisfied
- Not very satisfied
- Not at all satisfied

Please indicate which, if any, of the following EHR product vendor(s) your organization is using. Please mark all that apply.

- All Scripts
- Amazing Charts
- Athena Health
- Cerner Corporation (i.e., PowerChart/PowerWorks)
- CPSI (i.e., Medical Practice)
- e-ClinicalWorks (i.e., e ClinicalWorks Electronic Health Record)
- E-MDs
- Eclipsys Corporation (i.e., Sunrise)
- Epic Systems Corporation (i.e., EpicCare)
- GE Healthcare (i.e., Centricity)
- Greenway
- Internally developed system
- McKesson Corporation (i.e., Horizon Ambulatory Care or Practice Partner)
- MEDITECH (i.e., LSS)
- MedPlus (i.e., Care360 Physician Portal)
- NextGen (i.e., NextGen EHR)

- ☐ Pulse Systems
- ☐ Sage
- ☐ Other ______

For the following kinds of computer support, training and trouble shooting, please indicate if you have in-house staff, or if you have outside support.

	In-house	Outside	Combination of in-house and outside	No support	Don't know
Hardware	○	○	○	○	○
Software	○	○	○	○	○
Reporting	○	○	○	○	○

Please indicate how important the following reasons are for **not** fully adopting EHR technology at present:

	Very important	Somewhat important	Not very important	Not at all important
Too expensive	○	○	○	○
Not convinced of the return on investment	○	○	○	○
Requires too much technical support	○	○	○	○
No access to high-speed Internet connection	○	○	○	○
Lack of staff resources available to learn/implement new system	○	○	○	○
Interferes with practice-flow	○	○	○	○
Privacy/Security concerns	○	○	○	○

Are there any other reasons that your practice has not adopted an EHR system, as of yet?

1. ______
2. ______
3. ______

Please indicate which, if any, of the following elements are present on your current computer system:

	Yes	No	Don't know
Alerts if no note is received from clinician to whom you referred a patient	○	○	○

Abnormal laboratory result alerts	◯	◯	◯
Office visit notes from clinicians within the group or practice	◯	◯	◯
Electronic referrals to other clinicians	◯	◯	◯
Electronic radiology test ordering	◯	◯	◯
Office visit notes from clinicians outside the group or practice	◯	◯	◯
Medication interaction or contraindication alerts	◯	◯	◯
Electronic laboratory test ordering	◯	◯	◯
Clinical Decision Support (CDS)	◯	◯	◯
Laboratory results	◯	◯	◯
Patient medication lists	◯	◯	◯
Patient-specific formulary information, while writing prescriptions	◯	◯	◯
Tracking of immunizations	◯	◯	◯
Patient problem lists	◯	◯	◯
Hospital discharge summaries	◯	◯	◯
Prescriptions sent electronically (e-prescribing)	◯	◯	◯
Alerts if ordered tests are not performed	◯	◯	◯
Emergency department discharge summaries	◯	◯	◯
Radiology reports	◯	◯	◯
Radiology images	◯	◯	◯
Secure electronic messaging to and from patients	◯	◯	◯

Before this survey, how familiar were you with the federal government's Medicaid EHR Incentive Program that allows qualified professionals to receive up to $63,750 between 2011 and 2021 to implement or upgrade their EHR system?

- ◯ Very familiar
- ◯ Somewhat familiar
- ◯ Not very familiar
- ◯ Not at all familiar

How likely would you say you or the providers in your office will apply for up to $63,750 in Medicaid EHR Incentive Program funds in

the next 6 years?

- Definitely will
- Probably will
- Probably not
- Definitely not

When do you think you will start applying for the Medicaid incentives?

- 2011
- 2012
- 2013
- 2014
- 2015
- 2016
- Not sure

Can you please mark in rank order ("1" being the most important reason) the three most important reasons that you are not likely to apply for the Medicaid EHR Incentive Program?

- Will not meet Medicaid encounter volume threshold of 30% (20% for pediatricians)
- Do not plan to adopt a certified EHR
- Will not meet the Meaningful Use requirements
- Requirements of the Medicaid Incentive Payment Program are too difficult
- Do not understand the Medicaid EHR Incentive Program
- I do not feel that I meet the eligibility criteria
- Other: please specify

What type of Internet access, if any, do you have?

- No Internet
- Dial-up
- High-speed

Can you please mark in rank order (one being the most important reason) the three most important best ways to inform a physician's or dentist's practice about the availability of EHR incentive funds?

- Direct mail brochures
- Advertisements in clinical publications
- Advertisements on clinical websites
- Advertisements on TV, Radio and newspapers
- News stories in clinical publications

- [ ] Phone outreach from payers, such as Medicaid
- [ ] E-mail outreach from payers, such as Medicaid
- [ ] Information about the program from patients
- [ ] Information about the program from professional organizations like Mass Medical Society, Mass Dental Society, Mass Nurses Association
- [ ] Other: Please specify

Would you like a copy of the survey's key findings ?

- ◯ Yes, please send to the following email address:
- ◯ No

What is the zip code for your office location?

Please indicate your gender:

- ◯ Male
- ◯ Female

Thank you for taking the time to complete this survey. If there are other comments or thought we should keep in mind - please let us know.

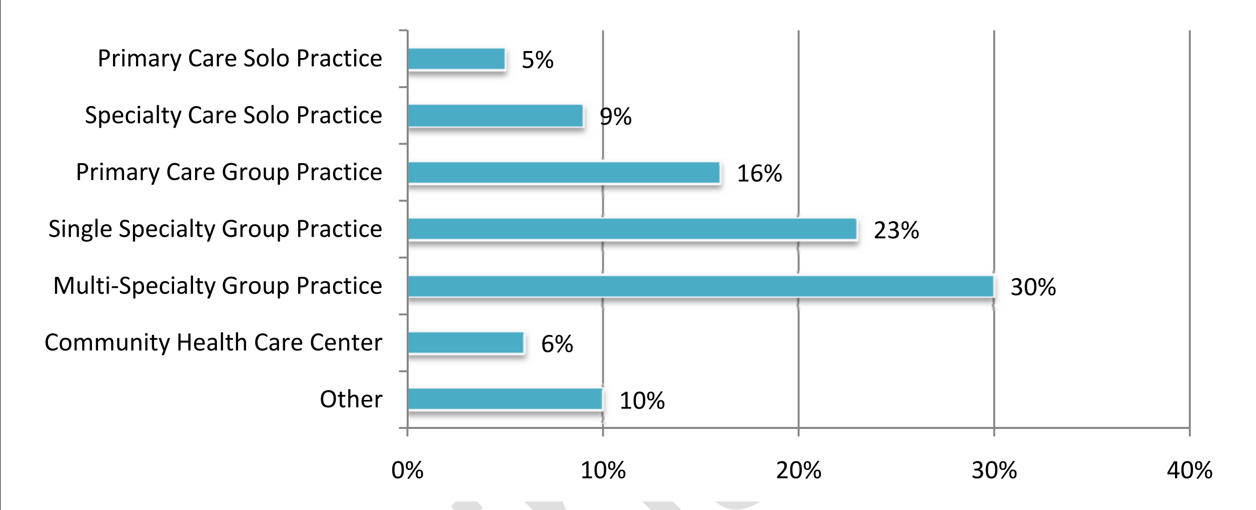
Appendix D: Provider Survey Results

Provider Survey Graph 1: Level of Survey Response by Organizational Type

Number of Respondents: Among Physicians; n=1,493

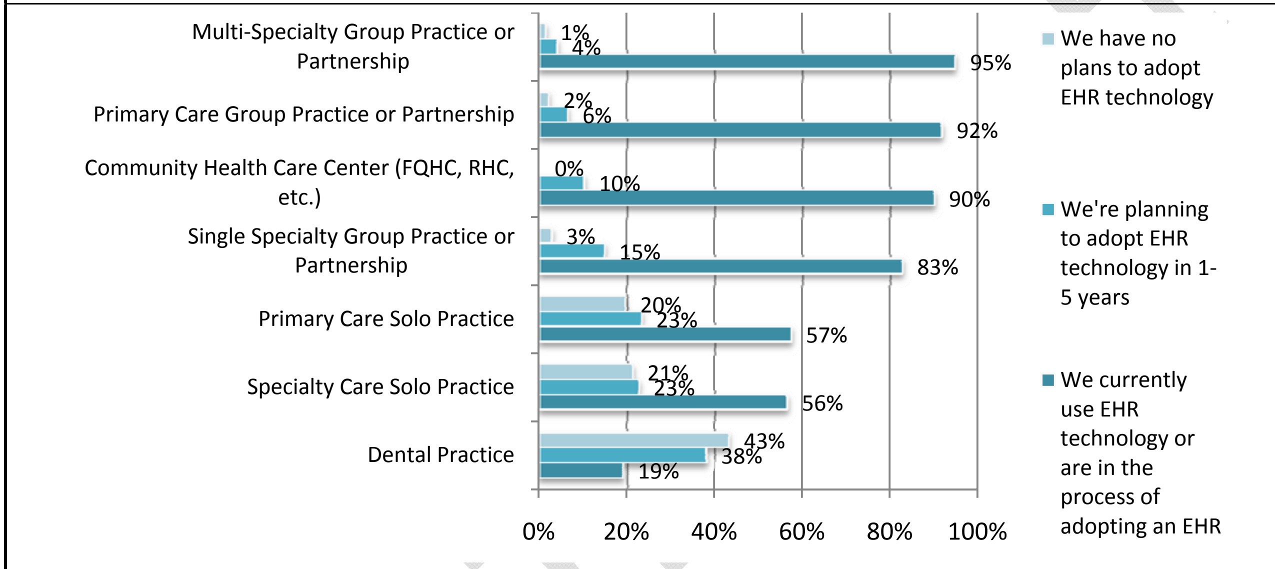
Survey Question 2: Which of the following describes the care provided by your organization?

Description: Of the 2,654 respondents to the survey 1,493 physicians completed the survey that did not provide 90% or more of their services in an in-patient or ER setting and that treat patients enrolled in Medicaid and/or Medicaid managed plans. Not surprisingly the largest demographic represented is the multi-specialty group practice.



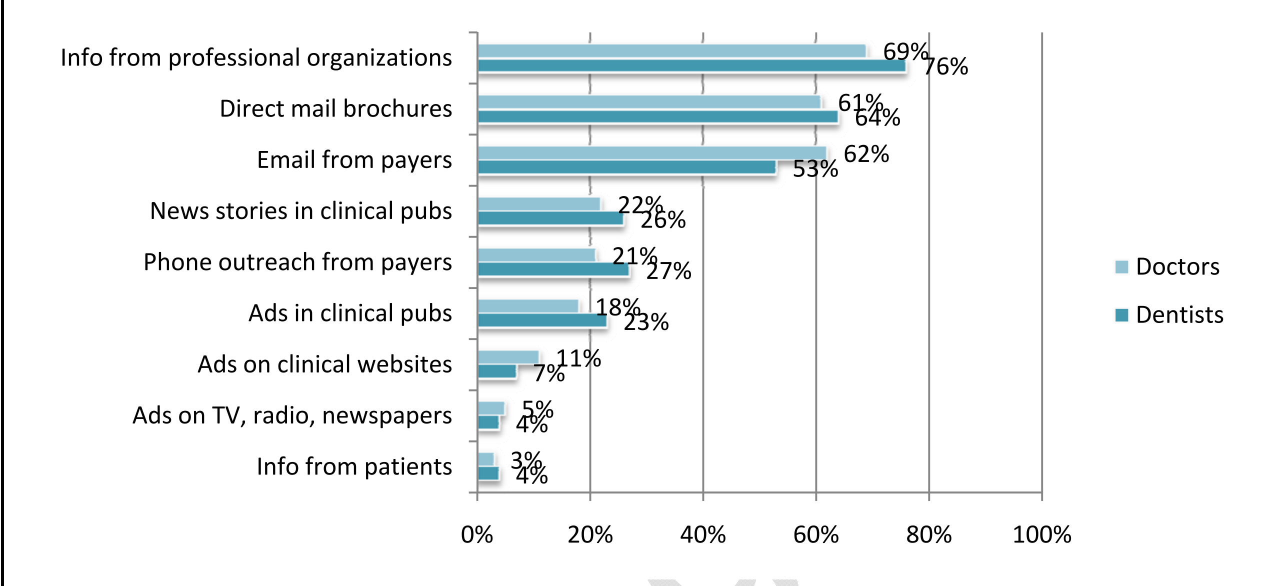
Working Draft

Provider Survey Graph 2: EHR Adoption Rates by Organizational Type
Number of Respondents: n=1427
Survey Question 8: How would you describe your practice's adoption of Electronic Health Record, or EHR, technology? **Survey Question 2:** Which of the following describes the care provided by your organization?
Description: A majority of Multi-Specialty Practices (95%) are using or are in the process of adopting an EHR. Similarly, CHCs in Massachusetts have an impressive 90% adoption rate (are using/in progress of adopting). As expected, the rate of adoption is closely linked to the practice type (size).



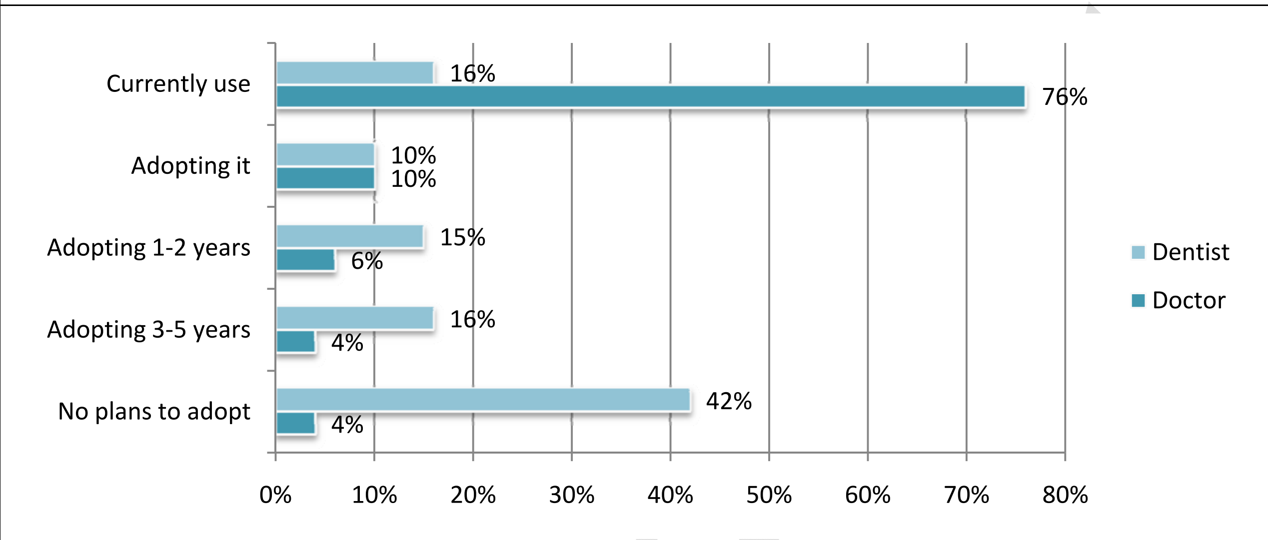
Working Draft

Provider Survey Graph 3: Preferred Communication Outreach
Number of Respondents: Net: Top 3 Results
Survey Question 21: Can you please mark in rank order (”1” being the most important reason) the three most important best ways to inform a physician’s or dentist’s practice about the availability of EHR incentive funds?
Description: A large majority of providers prefer to be informed about the availability of EHR Incentive Funds from professional organizations; the second most preferred outreach method is by direct mail brochures.



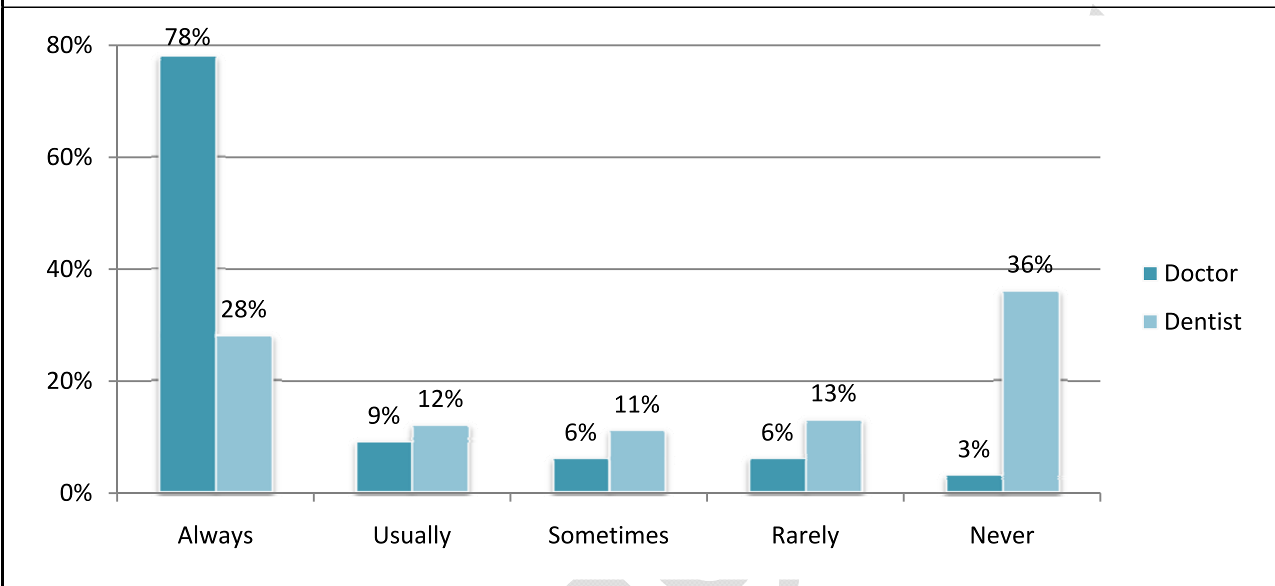
Working

Provider Survey Graph 4: EHR Adoption Rates by Dentist/Doctor
Number of Respondents: n=1,585
Survey Question 8: How would you describe your practice's adoption of Electronic Health Record, or EHR, technology?
Description: A distinct majority (76%) of doctors report they currently use EHR technology, whereas dentists report 16%. The survey shows 50% fewer dentists report they are currently using an EHR than doctors. 42% of Dentists also report they have no plans to adopt the technology.



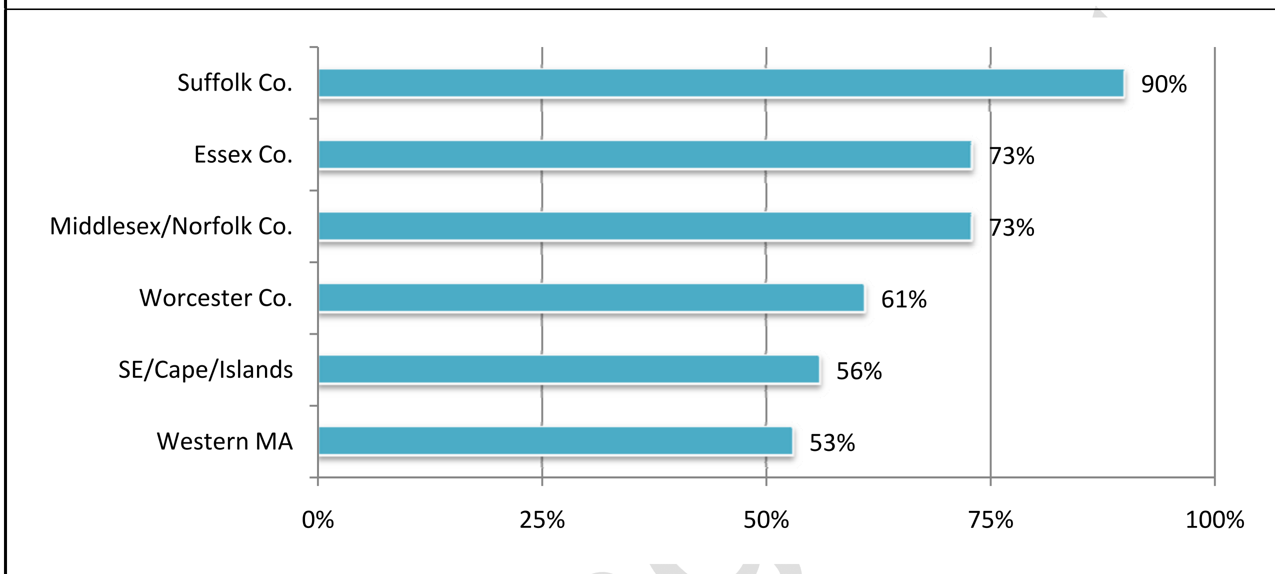
Working

Provider Survey Graph 5: Daily Computer use for Patient Information
Number of Respondents: n=1,585
Survey Question 7: During a typical day in which you are providing patient care, how often do you use a computer to look up a patient's medical information?
Description: 78% of Doctors report they always use a computer on a daily basis for patient medical information, whereas dentists report 28% daily use. A large number of dentists (36%) reported they never use a computer for patient medical information.



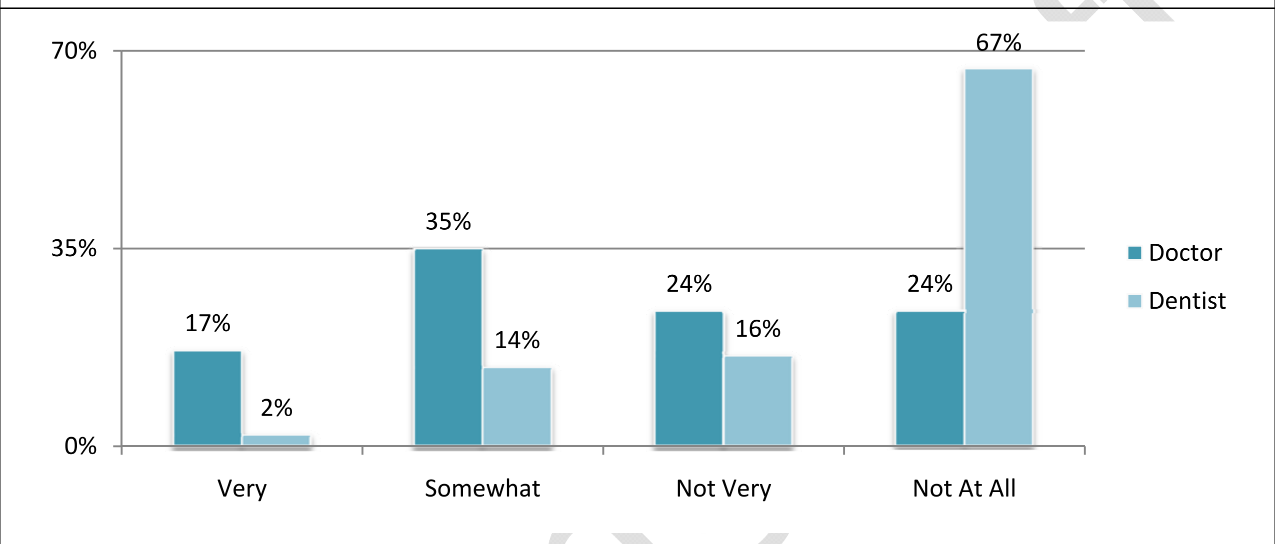
Working

Provider Survey Graph 6: EHR Adoption Rates by Region
Number of Respondents: Percentage who respond: "Currently using EHR technology" by Region; n=1,154
Survey Question 8: How would you describe your practice's adoption of Electronic Health Record, or EHR, technology? What is the zip code for your office location?
Description: The responses to this graph reinforce the generalization that the further away from Boston Central (Suffolk County) a Provider is that the less they are to have the resources available to adopt an EHR system; Western MA trails behind Suffolk County by 37%.



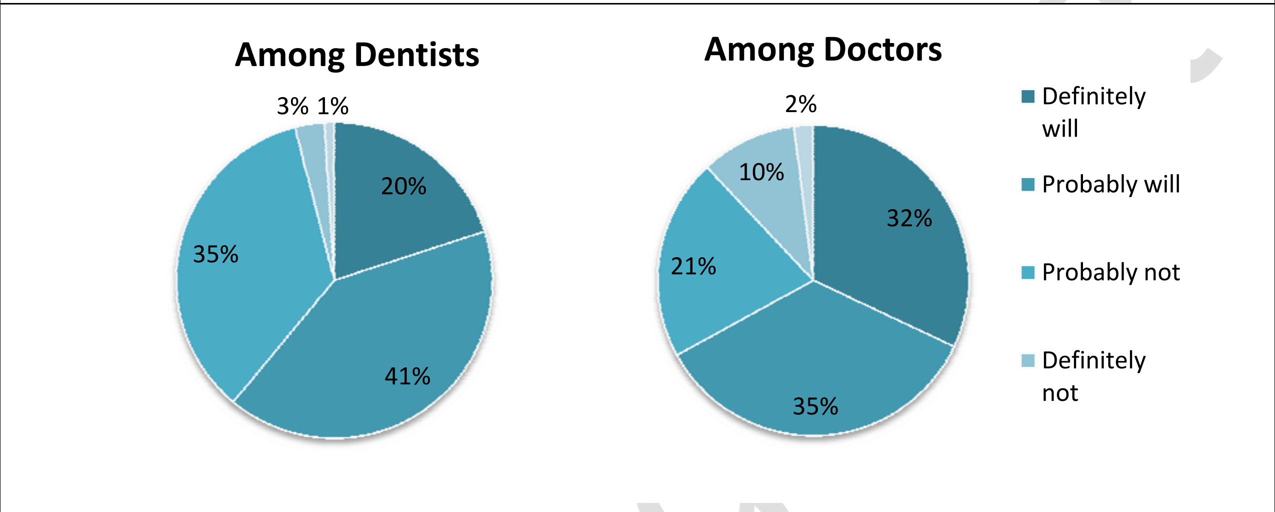
Working

Provider Survey Graph 7: EHR-IP Awareness
Number of Respondents: n=1,585
Survey Question 16: Before this survey, how familiar were you with the federal government's Medicaid EHR Incentive Program that allows qualified professionals to receive up to $63,750 between 2011 and 2021 to implement or upgrade their EHR system?
Description: Before this survey approximately half (48%) of Doctors reported they were either "not at all" or "not very" familiar with the EHR-IP program. Similarly 83% of dentists report they were either "not at all" or "not very" familiar with the EHR-IP program.



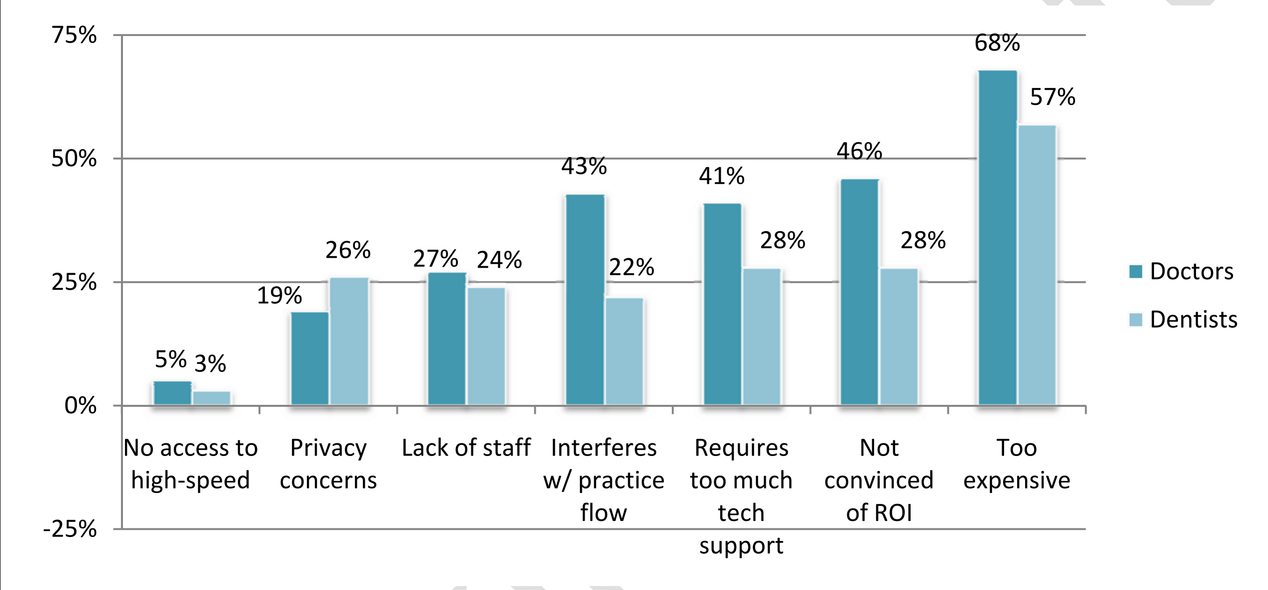
Working Draft

Provider Survey Graph 8: Likelihood to Participate in EHR-IP
Number of Respondents: n=1,585
Survey Question 17: How likely would you say you or the providers in your office will apply for up to $63,750 in Medicaid EHR Incentive Program funds in the next 6 years?
Description: 31% of doctors and 38% of dentists responded they will "probably not" or "definitely not" participate. An interesting correlation is graph 4 which depicts dentists as responding at 42% for "no plans to adopt" an EHR. This suggests that approximately 5% of dentists have/will have an EHR, yet have chosen not to participate in the EHR-IP; 27% for doctors.



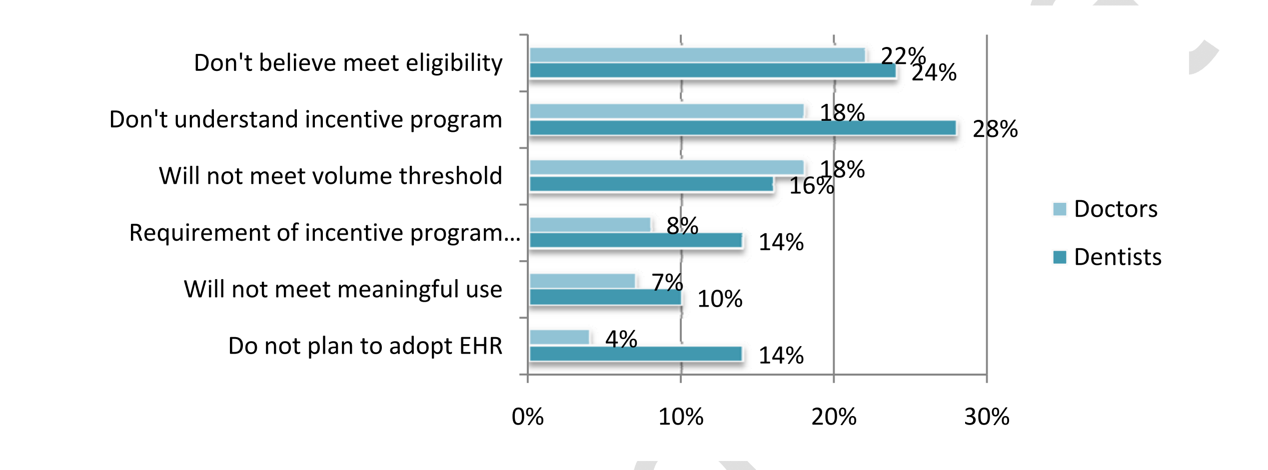
Working Draft

Provider Survey Graph 9: Barriers to EHR Adoption
Number of Respondents: Asked only among those who do not have or are not currently adopting EHR technology; n=275
Survey Question 12: Please indicate how important the following reasons are for not fully adopting EHR technology at present.
Description: Of those respondents that currently do not have or are not currently adopting an EHR system the majority believe that the biggest barrier to adoption is that it is too expensive (68% doctors/57% Dentists). Secondarily is that both groups are not convinced of the return on investment (ROI). It appears that dentists are more concerned with privacy issues than doctors.



Working Draft

Provider Survey Graph 10: Barriers to EHR-IP Participation
Number of Respondents: Net: Top 3 Results; n=498
Survey Question 19: Can you please mark in rank order ("1" being the most important reason) the three most important reasons that you are not likely to apply for the Medicaid EHR Incentive Program?
Description: This graph identifies concerns that we also heard during our Provider outreaches. The majority of providers are unsure if they are eligible, don't understand the program (and definition of Meaningful Use) and are unsure how to calculate their Medicaid Patient Volume Thresholds.



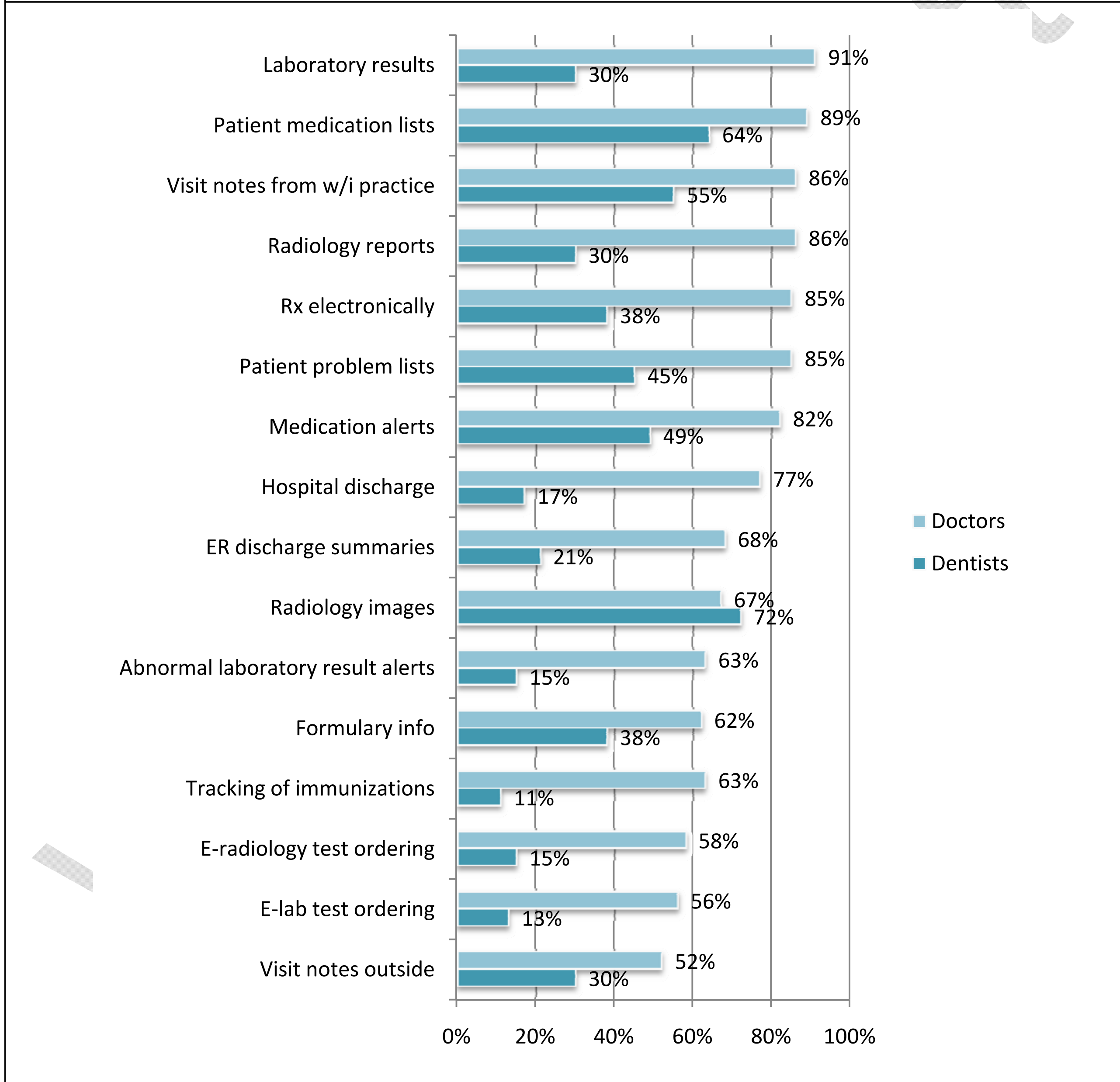
Working Draft

Provider Survey Graph 11: EHR Modules Currently Found on Provider EHRs

Number of Respondents: Asked only among those who Always, Usually or Sometimes use a computer system; n=1,438

Survey Question 14: Please indicate which, if any, of the following elements are present on your current computer system.

Description: Massachusetts is leading the country in e-Prescribing (Rx Electronically) and is currently at 85% adoption by doctors. Laboratory results, patient medication lists, internal visit notes and radiology reports are all highly adopted by doctors and are above 85% adoption as well.



Appendix E: SMHP Provider Meeting Notes

This appendix summarizes results of meetings conducted with Provider Associations during the Environmental Scan work of SMHP development.

SMHP PROVIDER MEETING RESULTS

Meeting with Massachusetts Veteran's Affairs (VA)	
Item	**Details**
Date of Meeting	November 24, 2010
Organization Background	The VA health care system has grown from 54 hospitals in 1930, to include 171 medical centers; more than 350 outpatient, community and outreach clinics; 126 nursing home care units; and 35 domiciliaries. VA health care facilities provide a broad spectrum of medical, surgical and rehabilitative care. The responsibilities and benefits programs of the Veterans Administration grew enormously during the following six decades. World War II resulted in not only a vast increase in the veteran population, but also in large number of new benefits enacted by the Congress for veterans of the war. The World War II GI Bill, signed into law on June 22, 1944, is said to have had more impact on the American way of life than any law since the Homestead Act more than a century ago. Further educational assistance acts were passed for the benefit of veterans of the Korean Conflict, the Vietnam Era, Persian Gulf War and the All-Volunteer Force.
Key Contact Information	Jason Atkins JasonVISN1.Atkins@va.gov
List of Attendees	Jason Atkins (VA) Nathan DesJardins, David Houle (BDMP)
Questions for the Association/Organization	
Item	**Details**
Promotion of EHR adoption	See below.
Provider education	See below.

Communication strategies	See below.
How can MassHealth best support your organization as it relates to the EHR-IP?	• VA has approximately 250,000 patients throughout New England...VT patients for example will travel to MA for services, etc., but also rely on local providers for other portions of their services. To this end VA sees improving HIEs as very important. • Have a large need to provide data to community centers to other States as well as receive this data.
Questions for Providers	
Item	**Details**
Barriers to EHR adoption	• VA is not eligible for ARRA funding HIE/EHR/EHR-IP, etc. (under then some construction grants). • VA providers are VA employees (Federal Employees) and thus are not eligible to participate in EHR-IP. • VA Bills Medicaid. Does not bill Medicare. • VA's EMR (Vista) is not certified. There appears that there may not be plans to become certified as they are not eligible. • VA has spoken with the REC (MeHI) in terms of the Beacon Community Grants. They were not approved.
Certified EHR adoption	VISTA: (VA's EMR) You can find more detailed info on the history of VistA/CPRS at http://en.wikipedia.org/wiki/VistA • Started in the early 1980s using underlying MUMPS database (MUMPS developed by Massachusetts General Hospital) • Evolved to CPRS (the GUI) for the vista architecture in 1997. • Individual instance of the software at each facility. Modules were added at each site by each scripter and if it tested well, worked well, it was shared nationally. • 128 different modules (Patient scheduling, fee based care, CPOE, Bar Coding administration, clinical reminders, lab results...) • They do have 3rd-party apps integrated with their VISTA too. Example GE products. • Leveraging HL7 Standards (messaging) like Indian Health Services.
Meaningful use by 2015	N/A

SMHP PROVIDER MEETING RESULTS

Meeting with Massachusetts Indian Health Services (IHS)	
Item	**Details**
Date of Meeting	November 22, 2010
Organization Background	The Indian Health Service (IHS), an agency within the Department of Health and Human Services, is responsible for providing federal health services to American Indians and Alaska Natives. The provision of health services to members of federally-recognized tribes grew out of the special government-to-government relationship between the federal government and Indian tribes. This relationship, established in 1787, is based on Article I, Section 8 of the Constitution and has been given form and substance by numerous treaties, laws, Supreme Court decisions and Executive Orders. The IHS is the principal federal health care provider and health advocate for Indian people and its goal is to raise their health status to the highest possible level. The IHS provides a comprehensive health service delivery system for approximately 1.9 million American Indians and Alaska Natives who belong to 564 federally recognized tribes in 35 states.
Key Contact Information	See below.
List of Attendees	CDR Robin A. Bartlett, PharmD, NCPS Nashville Area Indian Health Service Clinical Applications Coordinator EHR Consultant/Area Pharmacy Contact 711 Stewarts Ferry Pike Nashville, TN 37214 Phone: (615) 467-1577 Cell: (615) 719-2955 Fax: (615) 467-1485 robin.bartlett@ihs.gov robin.bartlett@cherokeehospital.org
Questions for the Association/Organization	
Item	**Details**
Promotion of EHR adoption	Conferences, annual training with CMS, two regional meetings (north and south). United tribes organization. 3x per year they have meetings to promote meaningful use, etc. We also have an IHS website where we promote information and education about HIT, etc. Site survey issued by IHS. Then go onsite to document workflow. EHR site tracking record. Then provide basic training via the clinical applications

	coordinator. EHR set up visit is then scheduled to help with configuration, etc. This appears very similar to REC services. IHS has its own REC and Robin expects the two sites in MA to sign up with "their" REC not the State's.
Provider education	See above.
Communication strategies	See above.
What is the definition of the Resources & Patient Management System (RPMS)?	RPMS is the underlying modules of the health care system. GUI sits on top of that (RPMS-EHR).Similar to the VA's, which uses VISTA (very similar to RPMS).
ARRA Funding: IHS has been granted $227 million for health facilities construction, $100 million for maintenance and improvements, $85 million for health information technology. What initiatives are underway or planned to use this money in terms of EHR adoption?	Have used for telemedicine and internal consulting services for EHR adoption. Most of the money has been spent or will be spent by January 2011.
What is the current state of broadband in Indian Country?	Believes that sites in MA have sufficient broadband via either T-1 or fiber. Mashpee to be housed onsite. RPMS server for Wampanoag Gayhead is here in Nashville.
Questions for Providers	
Item	**Details**
Barriers to EHR adoption	Going onsite with Mashpee Wampanoag in January/February2011.
Certified EHR adoption	Currently CCHIT certified. Looking at February 2011 for meaningful use certification.

Meaningful use by 2015	See above.
Aware of the REC? How can MassHealth best support your organization as it relates to the EHR-IP?	In MA they are currently doing paper claims. No electronic interface with NewMMIS today. This is not a big priority right now for IHS. Immunization information is also important to interface with in most states. HL7 is the preferred platform (in-use) for IHS. IHS and VA have good coordination. In MA the services at IHS are outpatient facilities only. IHS Providers are mostly eligible to participate in EHR-IP.

SMHP PROVIDER MEETING RESULTS

Meeting with Massachusetts Association of Behavioral Health Systems	
Item	**Details**
Date of Meeting	December 6, 2010
Organization Background	The Massachusetts Association of Behavioral Health Systems (MABHS) is the only trade association in Massachusetts whose central mission is to focus on inpatient psychiatric and substance abuse issues. Originally founded in 1989 by the freestanding psychiatric hospitals, the MABHS has grown over the years and now consists of 46 inpatient facilities statewide, from the Berkshires to Cape Cod. Its member facilities have over 2000 beds and admit over 45,000 patients on an annual basis. Its members include freestanding psychiatric hospitals; substance abuse facilities; and psychiatric units in acute general hospitals.
Key Contact Information	David Matteodo, dmatteodo@aol.com, 617-855-3520
List of Attendees	David Matteodo and BDMP
Feedback on Questions for the Association/Organization	
Item	**Details**
Promotion of EHR adoption	Making people aware of what is going on at the federal level. Conveyance of information via meetings Meetings and email are used to convey information to members.
Provider education	Not applicable.
Communication strategies	Weekly email communications has worked best. MABHS does very little paper mailings.
How can MassHealth best support your organization as it relates to the EHR-IP?	In MA they are really emphasizing integrated care, total care to get away from "fee for service." EHR is critical to sharing information, but so far Behavioral health is excluded from this program. The best support would be to get behavioral health included. Somehow, someway. Our national association is preparing legislation to address the "oversight" of the current funding model.

Feedback on Questions for Providers	
Item	**Details**
Barriers to EHR adoption	Varies depending on facility. Financial and picking the right system that will be able to communicate with the various parties. A key issue with Mental Health is the confidentiality of mental health vs. physical health. This is a key concern. Patient rights and security are paramount.
Certified EHR adoption	Not applicable.
Meaningful use by 2015	Don't know.
Aware of the REC? How can MassHealth best support your organization as it relates to the EHR-IP?	Not aware of the REC. MassHealth can best support by helping us financially. Please see attached testimony to the HIT Council dated April 28, 2009.

Feedback on Vision Questions	
Item	**Details**
Provider feedback on Statewide HIT Goal 1 and associated Objectives	1. Equitably increase the number of providers who can demonstrate meaningful use of interoperable EHRs across all service areas, including rural, suburban and urban areas where health disparities have been identified.
Provider feedback on Statewide HIT Goal 2 and associated Objectives	1. Adopt and promulgate a common set of Health IT enabled quality and safety measures across all payers and providers. 2. Leverage existing reporting infrastructure, when appropriate.
Provider feedback on Statewide HIT Goal 3 and associated Objectives	1. Patients report more timely, effective and appropriate care, both virtual and face to face. 2. Engage patients to actively participate in managing their health information, their health and their care and encourage providers to engage with and respond to their patients.
Provider feedback on Statewide HIT Goal 4 and associated Objectives	1. Develop and promote effective and accessible disease prevention, health and wellness programs.
What is important to BH providers that are not represented in the above?	So far Behavioral health is excluded from this program.

SMHP PROVIDER MEETING RESULTS

Meeting with MassLeague	
Item	**Details**
Date of Meeting	December 2, 2010
Organization Background	Established in 1972, the Massachusetts League of Community Health Centers ("the League") is a non-profit, statewide association representing and serving the needs of the state's 52 community health centers and recognized by HRSA as the Massachusetts Primary Care Association. The League serves as an Information Source on community-based health care to policymakers, opinion leaders and the media and provides a wide range of technical assistance to its members and communities, including: • Analysis of state and federal health regulatory and policy issues affecting health centers providing support to centers to implement and comply with changing policies, regulatory and payer expectations; • Training and Education for health center leadership, administrators, clinicians, staff and board members; • Workforce Development initiatives to increase recruitment of primary care physicians and to provide career and skill development training for health center employees; • Information Technology Development primarily focused on electronic medical records implementation and enhancing the value added use of technology and EHR with improved reporting and standardization of use including development of a web-based quality benchmark reporting tool drawing from multiple EHR platforms; • Support to Expand Health Access through work with existing community health centers to expand their services and service areas, collaboration with stakeholders to expand community health centers and work with local health and advocacy organizations seeking to open health centers in their communities.
Key Contact Information	Ellen Hafer (ehafer@massleague.org) Executive Vice President and COO 617-988-2252 Michelle Woliner (mwoliner@massleague.org) Administrative and Business Coordinator 617-988-2251 MassLeague 40 Court St, 10th Floor Boston, MA 02108 (617)-426-2225

List of Attendees	Caring Health Center, Inc: Anthony Lefebvre; CIO Caring Health Center, Inc: Frank Kostek; CFO Community Health Center of Franklin County: Mary-Jo Korphage-Poret; Clinical Director Community Health Center of Franklin County: Sarah Kemble, MD; Founder and CQO Community Health Center of Franklin County: Wes Hamilton; Director of IT/EHR Community Health Programs, Inc.: Jenn Wilkinson ; Director of Operations Community Health Programs, Inc.: Phil Morrison; CFO Dimock Community Health Center: David Whitham; Director of Information Services Dimock Community Health Center: Peter Gerondeau; Sr. VP of Finance and Admin HealthFirst Family Care Center, Inc.: Jonathan Teves; Manger, IT & Telecommunications HealthFirst Family Care Center, Inc.: Julie M. Almond,; CEO HealthFirst Family Care Center, Inc.: Lynda Greene; Director, Clinical Operations Hilltown Community Health Center: Ed Sayer; Executive Director Holyoke Health Center: Dr. Alex Esparza ; EMR Provider Champion Holyoke Health Center: Jay Breines; CEO Holyoke Health Center: Laura Failla Manship; Director, Behavioral Health & Operations Holyoke Health Center: Loriann Ruiz ; Operations Manager Holyoke Health Center: Matt Pasquale; IT Manager Massachusetts eHealth Institute: Kelli McLaney; Clinical Relationship Manager MLCHC : Ellen Hafer; Executive VP and COO MLCHC : Mark Josephson; Clinical and Business Systems Data Analyst MLCHC : Michelle Woliner; Business Systems Coordinator MLCHC IOO Consultant: Adrian Bishop MLCHC IOO Consultant: John Cupples MLCHC IOO Consultant: Margaret Oakes MLCHC IOO Consultant: Nancy Tabarangao Consultant: Jeff Stephen Consultant: Maria D. Sibella Consultant: Michael P. McGowan

Questions for the Association/Organization	
Item	**Details**
Promotion of EHR adoption	The MLCHC provided a baseline HIT survey on the status of community health centers in 2004. This survey highlighted that only 22 centers had an EMR and there were significant barriers for the other 29 centers. 7 of the 29 expected help from their hospital sponsors and the remaining 22 would need help from the MLCHC and were open to collaboration. The 22 centers were all independent 501c3 with 3 located in Boston and 19 located throughout the state of MA. The MLCHC has worked since conducting this study to support EHR adoption by community health centers including providing training, project management, leveraging other resources, raising funds to support implementation and working to support the reporting needs of community health centers through the development of a web-based centralized data reporting system providing over 40 quality benchmark and KPI reports including across center comparisons down to direct provider patient reports and profiles with direct daily feeds from 3 EHR platforms. Currently, 10 centers are participating with 2 of the 10 just implementing their EMR adoption. The MLCHC since 2004 has increasingly adopted and refined a strategic organizational commitment “working to Achieve 100% EHR by 2011 and 100% Meaningful Use by 2012” for our member community health centers. Since 2004, we have provided a range of services in support of and promoting EHR Adoption. Since 2004, with a combination of direct support from the MLCHC, leveraged funding from a mix of private and public support, collaborative project support with community health center networks and hospital affiliations and direct support from hospitals for centers operating under hospital 501c3 corporations. Today we have 43 CHC organizations with an EMR (85% penetration)-7 independent CHCs needing to implement an EHR for the first time and an additional 4 CHCs needing a replacement EHR. Since 2005, we have had three cycles of funding to support EHR implementation at community health centers. As a part of these initiatives we have offered sessions on Implementing EHR- from Feasibility to Completion. We have covered readiness, project planning, project budgeting, vendor selection and project implementation. Through feasibility and readiness assessments we have identified centers to participate in initiatives for actual implementation of the EMR over 3 statewide initiatives. Through these projects we have developed an EHR Implementation and Technical Assistance Consultant Team that we are able to continuously use within varying levels of available resources to support the exploratory, implementation as well as trouble shooting needs of community health

	centers. This team is key to our implementation of our Implementation Optimization Organization (IOO) Agreement with the REC (Regional Extension Center).
Provider education	Activities and Initiatives we have provided since 2004: 1. Continuous tracking through surveys of the status of EHR implementation at CHC for strategy development and to meet information needs of CC and of government and other stakeholders. 2. Continuous provision of electronic information to CHC leadership about evolving state and federal policy around EMR implementation and use. 3. Annually since 2005, each May at our 3-day Community Health Institute we have provided 2 to 3 sessions that relate to EHR implementation, 2 to 3 sessions on managing change and transformation of practices and primary care for senior management teams including medical directors, focus groups for centers on EMR implementation needs and issues and vendor product and service demonstrations. 4. We have an annual membership strategy session. Our recent December session had two sessions focusing on EMR, HIT and Meaningful Use. 5. In February 2010, we held a Quality as a Business Strategy Session which included a focus on EMR use and data management for achieving quality outcomes and needed reporting. 6. We maintain quarterly forums for CHC Medical Directors, IT Directors, Financial Directors/CFO and Human Resource Directors where we periodically bring updates on EHR initiatives and policy at the city, state and federal level including federal “meaningful use” agenda. We recently had our national association EHR staff liaison to ONC speak to our Medical Directors on Meaningful Use. 7. Through our implementation initiatives we have provided direct training to providers on EMR implementation and adoption including supporting the adoption cycle. 8. Through support of our web-based reporting solution for EHR-CHIA DRVS- we support a steering committee and reporting committee for mutual guidance. We conduct 2 conference calls and meetings monthly and these include a range of staff at the centers including medical directors, clinical and quality leaders. 9. Since 2005, we have provided project management and support for 13 CHC EHR implementations. These have provided planning, coordination and direct support for training, business work flow mapping and change and adoption of EMR by an estimated 260 PCP providers. 10. In addition, since 2005 we have assisted 14 additional community health centers including provider champions in early education, preliminary assessment of readiness and need, feasibility assessment and work flow assessment and change and product selection and project plan development.

Communication strategies	We have list serves for all our community health centers senior management and Board leadership and maintain continuous updates to them through direct e-mail about the REC/IOO and CMS incentive programs. We also have an electronic e-newsletter that goes out weekly to CHC leadership and includes all updates on policies, funding, initiatives and regulations that we use for appropriate updates. We will continue to utilize our key CHC leadership forums to communicate on EHR and meaningful use initiatives and incentives. We also keep information posted on our website related to announcements, projects, initiatives and events as well as posting PowerPoints. We currently have steering committee conference calls and meetings twice a month for our EHR reporting tool and we provide policy, initiatives and environmental updates at each call. We anticipate expanding this for "user" and initiative work groups on EHR and MU implementations.
Questions for Providers	
Item	**Details**
Barriers to EHR adoption	The federally funded (41 of the 50 organizations) are organized as independent 501c3 non-profit corporations and are required by federal grant expectations as federally funded or as FQHC "look-a-likes" to have a Board of Directors with at least 51% of the board made up of patients of the health center. In addition, the Boards are made up of a variety of local business people, community and other organizational leaders, as well as other professionals bringing business, legal and financial expertise to the Board. The Board has programmatic, policy and fiduciary responsibility for approving major initiatives and operational and capital budgets. Because of the mix of experience in the membership of community health center Boards and their decision-making responsibility it will be important to provide support where needed for Board decision-making and understanding of the federal and state initiatives and the value of EHR to support patient service quality and safety. The MLCHC is prepared to provide support to Boards and management in decision-making and understanding EHR Initiatives and value. • For the CHC without an EHR the need to have the money in hand to move forward ASAP, to make it real, "Get it from the atmosphere" so CHC have clarity and guidance to start formulating budgets around and project plans. • The understanding is that the Centers without an EHR are eligible for $4,500 from the REC to the IOO for resources through 2012. • CHCs fear that EHRs will cause a "loss of productivity," that is, a "gap" during the transitional phases of the implementation where productivity and, therefore, money is lost...and that it can take as much as 2 to 3 years to get back to normal.

Certified EHR adoption	• The understanding is that no MA CHCs have the "MU" certified versions of their EHR. For the independent community health centers with an EHR 4 are understood to have products that will not be certifiable and will have to be replaced completely. The remaining 30 have products that are federally certified and with companies certified by the REC and will be in line to upgrade to a certified version. The remaining 9 centers that operate under hospital corporations and use hospital systems will be dependent on the hospital systems getting certified. This has not happened to date. The MLCHC is reaching out to these centers to keep them updated along with the FQHC to keep them current. In addition, the MLCHC is outreaching to see if the hospital community-based health centers need support in clarifying status with their hospitals of their EHR plans for certification and meeting meaningful use reporting requirements. • CHCs as a whole are ahead of the EHR adoption curve (85% adopted). • CHCs are still unsure how the rules read: How do we define the specific deliverables of "meaningful use." • Worried that since the SMHP isn't yet written that their providers may be missing proper guidance and need timely guidance. • Concerned about how data uniformity will get applied (data standards) in terms of collecting and reporting data. • CHC providers are ready largely because as a whole they represent a younger demographic than other provider types and bring an interest in population based medicine. • Unsure if the EHR product(s) will give the output they need such as reports. • Feel as if they do not have the right analysis tools/knowledge to determine the right products for their unique and often multi-specialty (primary care, dental, behavior health etc.) needs (They feel like they are potentially being mislead by good sales pitches). • Feeling like the boundaries between the REC and IOOs and other state agencies are vague (SLAs). • Mass League in previous implementations felt like they owned more of the bargaining power as they were the ones to release money to the vendors. No longer the case for this program. Worried that now it will be harder to hold the vendors accountable for fully delivering in a timely manner for their contractual responsibilities and commitments especially around training.
Meaningful use by 2015	• Believe the majority of the CHCs will hit meaningful use in a year to 18 months. • The ones that are just starting will still have a chance to reach MU by 2015. The goal is to get them there sooner to support the work force and remain competitive. Important to close the adoption and use gap in CHC without an EHR to date.

Aware of the REC? How can MassHealth best support your organization as it relates to the EHR-IP?	• They want to know what evidence needs to be presented in order to get the first EHR-IP dollars to become "released." What will be the documentation for adoption, implementation? What will be the required documentation for "MU" for the REC and CMS incentives? Given the need to implement an integrated EHR (EPM and EMR), the time to implement the EPM first will be an effort if not close to impossible to feel confident about meeting January 2012 MU requirements, but the CHC without an EHR need the REC dollars. They also need to be prepared to get a reporting structure as soon as they implement. The MLCHC has a reporting solution that would be available to centers and they intend to add "MU" reporting to it. The MLCHC is also working on a business plan for a hosted solution which would be intended to ramp up the implementation timeline and use for CHC without an EHR. • They are unsure what they are allowed to spend the EHR-IP money on, once received: o They believe they will need to show accounting evidence of cost justification and so forth... is this going to be a reimbursement model? Or a performance model or a mix? • Welcome clarifications on how they become an EP and receive EHR-IP/ threshold calculations, etc. question on the distinction between FQHCS and look-a-like Health Centers and eligibility thresholds for community based hospital CHCs. How quickly and in what form do they need to send their data on provider's patient population to meet requirements for eligible professionals. • They welcome more communication (to feel like they are being looked at/listened to...)
Feedback on Vision Questions	
Item	**Details**
Provider feedback on Statewide HIT Goal 1 and associated Objectives	1. (Tie) Assure private and secure electronic access, use and portability of protected health information by all authorized individuals. 2. (Tie) Increase the number of patients whose care is coordinated across disparate delivery systems within the state and across state boundaries.
Provider feedback on Statewide HIT Goal 2 and associated Objectives	1. Adopt and promulgate a common set of Health IT enabled quality and safety measures across all payers and providers. 2. Commit to the principles that hospitals and health care providers would report quality and safety measures one way, one time and to one place, to ensure they are collected consistently and with minimum administrative burden.
Provider feedback on Statewide HIT Goal 3 and associated	1. All payers in the Commonwealth will adopt a single set of Federal standards for eligibility and claims payment processes, which will be incorporated into certified EHRs.

Objectives	
Provider feedback on Statewide HIT Goal 4 and associated Objectives	1. Support health reform in the Commonwealth, by providing ready access to data and information that is necessary for identification and implementation of key reform policies and strategies, being meticulous about protecting patient information and carefully following the minimum necessary use of information standards.
What is missing?	Integrating the importance of Health Information Exchange to achieve “meaningful use” including reports on patient care at other locations as“POS” information and for quality reporting. Integrating the EHR and “MU” initiatives with other initiatives impacting the system including medical home and payment reform.

SMHP PROVIDER MEETING RESULTS

Meeting with Coalition of Nurse Practitioners	
Item	**Details**
Date of Meeting	December 9, 2010
Organization Background	**About the MCNP** The Massachusetts Coalition of Nurse Practitioners (MCNP) was organized in 1992 to provide focused representation and support of issues relevant to all Massachusetts Nurse Practitioners regardless of specialty or organizational affiliation. **Purpose of the MCNP** • Work for the improvement of and access to health care for all people; • Foster high standards of advanced nursing practice, education and research: • Promote the professional development of nurse practitioners; • Establish and maintain coalitions with professional nursing organizations, non-nursing health care organizations, business and consumer groups; • Establish and promote participation in the public policy process and advocate for nurse practitioners in Massachusetts. • 59,000 nurse practitioners in MA; Have two full time lobbyist; Volunteer organization • Most NPs are in employment situations. There are a few in their own practices and some large NP run primary care organizations in Western Massachusetts. • Nancy is the Mass State Representative to the American Academy of NPs. • Since the survey in Massachusetts was executed via BORID and BORIM, NPs were excluded. • Although the NPs were not part of the survey, NPs appear to largely be represented by the data.
Key Contact Information	Nancy Orourke
List of Attendees	Nancy Orourke nancyc.orourke@gmail.com

Feedback on Questions for the Association/Organization	
Item	**Details**
Promotion of EHR adoption	• Partnered with MeHI as a sponsor and have a list serve they can leverage. • Annual meeting held (next in May). • Expecting to hold a webinar (using some of the materials we shared today). • Website.
Provider education	• EHR-IP is largely a new term for the group; Meaningful Use is still a vague term, they feel as if they have not seen a clear definition of Meaningful Use • The larger NP groups are in discussion of these programs...
Communication strategies	• Done open conference calls, summit is upcoming in March (plan to piggy-back this topic). • Think that television and radio are great outreach methods.
Feedback on Questions for Providers	
Item	**Details**
Barriers to EHR adoption	• Cost/funding is the most commonly communicated barrier.
Certified EHR adoption	• Boston Medical center has had EHR for over 10 years... and also provides services to Medicaid patients. Concerned about existing EHRs will be able to apply for certification, etc.
Meaningful use by 2015	• Again, wishes the meaningful use definition would be more clearly defined.
Aware of the REC? How can MassHealth best support your organization as it relates to the EHR-IP?	• Feels like the initial cost of the REC (up front buy-in of $600) may be a barrier. • The CofNPs believes it would be helpful if MassHealth had an educational webpage for providers to view. They feel it is key that MassHealth helps provide communication/information for their organization to leverage/share. They also feel like MassHealth will need to help provider's walk-through the EHR-IP enrollment process and so forth. • Important: Transparency in the quality of care, so, that the outcomes are tracked in a global way; providers must be tracked and measured.

Feedback on Vision Questions	
Item	**Details**
Provider feedback on Statewide HIT Goal 1 and associated Objectives	2. Increase the number of patients whose care is coordinated across disparate delivery systems within the state and across state boundaries.
Provider feedback on Statewide HIT Goal 2 and associated Objectives	1. Adopt and promulgate a common set of Health IT enabled quality and safety measures across all payers and providers. 2. Equitably increase the number of ambulatory primary care providers that have re-engineered their care processes, to better manage chronic conditions, through adoption of patient centered medical home processes and Health IT that supports evidence based care.
Provider feedback on Statewide HIT Goal 3 and associated Objectives	1. All payers in the Commonwealth will adopt a single set of Federal standards for eligibility and claims payment processes, which will be incorporated into certified EHRs 2. Patients report more timely, effective and appropriate care, both virtual and face to face
Provider feedback on Statewide HIT Goal 4 and associated Objectives	1. Support health reform in the Commonwealth, by providing ready access to data and information that is necessary for identification and implementation of key reform policies and strategies, being meticulous about protecting patient information and carefully following the minimum necessary use of information standards.

SMHP PROVIDER MEETING RESULTS

<table>
<tr><th colspan="2">Meeting with Massachusetts Medical Society</th></tr>
<tr><th>Item</th><th>Details</th></tr>
<tr><td>Date of Meeting</td><td>December 2, 2010</td></tr>
<tr><td>Organization Background</td><td>The Massachusetts Medical Society is the statewide professional association for physicians and medical students. Dedicated to educating and advocating for the patients and physicians of Massachusetts.

The MMS publishes the New England Journal of Medicine, a leading global medical journal and web site and Journal Watch alerts and newsletters covering 12 specialties.

The MMS is also a leader in continuing medical education for health care professionals throughout Massachusetts, conducting a variety of medical education programs for physicians and health care professionals.

• Founded: Acts of Incorporation received final approval from the Massachusetts State Legislature on November 1, 1781. We are the oldest continuously operating state medical society in the United States.

• Size (as of 04/26/2010): 22,894 physicians and medical students. About 50% of all licensed physicians in the state are members. (There are more community health center physicians in the MMS than academic ones.)

• Locations:
Main offices in Waltham, MA.
Regional offices in Lakeville and Wilbraham, Mass.
Editorial offices for the New England Journal of Medicine in Boston

Dr. Rick Mindess (Provider) was on the conference call with us.
Orthopedic surgeon: started since January 2010 in Springfield (exploded in size since)
• Started as paperless office since the beginning
• His demographic includes many Medicaid patients
• Rick was part of the previous pilot:
    o 2007: Blue Cross and Blue Shield of Massachusetts provided $50 million to fund the MA e-health Collaborative for 3 years. This pilot project gave EHRs – software,</td></tr>
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	hardware, installation, training, support – to virtually all physicians in three Massachusetts communities. ▪ The North Adams Community most notably had chosen one (1) single EMR for the whole community and had by far the most success.
Key Contact Information	Leon Barzin Director – IT/Liaison to Committee on Information Technology at the Massachusetts Medical Society 860 Winter Street Waltham, MA 02451 (339)204.0824 lbarzin@mms.org Stephen Phelan Director of Membership at the Massachusetts Medical Society 860 Winter Street Waltham, MA 02451 (781) 434.7320 sphelan@mms.org
List of Attendees	BDMP: David Houle, Nathan DesJardins, Joshua Slen, Seth Hedstrom NEJM: Leon Barzin MMS: Stephen Phelan Orthopedic Surgeon: Dr. Rick Mindess
Questions for Providers	
Item	**Details**
Barriers to EHR adoption	• The number one obstacle is the fear of the unknown. • Second is fear of change • Worried about the "gap" (of productivity) that is the transition going from one system to the next • "There seems like there has been a long tradition that lots of physicians have spent lots of money to date with little payback"
Certified EHR adoption	• Sees that the smaller practices tend to be less EHR adopted (west of Worcester)
Meaningful use by 2015	• Believes Meaningful Use is a very difficult thing to obtain: ○ Many providers have functionality they know they have, but haven't had a chance to use this functionality • Implementing new systems needs to be specific to people's needs/size so forth. • Providers don't know the right questions to ask before buying until AFTER buying an EHR.

	• Physicians need easy access to "the right questions."
	• Doctors that currently use paper at some point have done efficiency studies to determine how their paper systems perform.
	• The biggest mistake has been that providers have carried over their paper based business processes to their EHR systems.
	  o Example: have a scribe to takes notes...
	• Rick's Office: Feels like they have already met meaningful use.
	  o (Meeting 20 of 23 initiatives already)
	• Feels like 99% of his peers do not know what meaningful use is or would say they simply do not have any time to implement one.
	• The eHealth Collaborative is a IOO and the REC for NH:
	  o Hosting live events (webinars) in January
	• News Letter: Started with about 10 people and without a pre-determined address book. Grown solely by demand, word of mouth etc.

Aware of the REC? How can MassHealth best support your organization as it relates to the EHR-IP?	• A large number of small practices have not yet implemented systems and have little knowledge of the systems and or EHR-IP. • Physicians have the impression is that the REC has meager resources and has spread them too thin. • Believes Physicians will negatively view fee(s) charged by the REC for consultations/help.
Questions for the Association/Organization	
Item	**Details**
Promotion of EHR adoption	• PIAM provides a 5% premium discount on their liability product for physicians that adopt EHRs. • Organized a specific team that has a variety of stakeholders. • Created a website with wizard like linking to resources. • Conducting awareness/outreach via a news letter (bi-weekly). • Educational Groups. • Focused seminars on the legal aspects of EHR adoption. • Send out "Vitalsigns" weekly electronically, hardcopy monthly • Engaged other States (future February 2010 meeting). • Sent out a survey that asked about the REC, relationship with the REC and so forth. • Need to use multi-channel outreach... • Also use television programs (mostly used for clinical issues).
Provider education	See above.
Communication strategies	See above.

How can MassHealth best support your organization as it relates to the EHR-IP?	• MassHealth has a long history of difficult billing. • Feels like MassHealth has an obligation to bump up the pay for some services for those Providers that participate in EHRs: ○ Basically if it is going to make MassHealth more efficient and thus save money when they should share the savings. (Partnership Approach) • Physicians are already over regulated... • Clearer definitions that are precisely targeted to specific groups • Fears that rewards and/or penalties are out of touch with what the Providers actually do... example lab work (even though he might only use 2 lab results a week). • Could partner with MMS in their outreaches.
Feedback on Vision Questions	
Item	**Details**
Provider feedback on Statewide HIT Goal 1 and associated Objectives	Dr. Mindess: "I have reviewed the goals and objectives and I believe that (Equitably increase the number of providers who demonstrate meaningful use of interoperable EHR…) is the most important objective. Without a large number of quality EMR users, most of the other objectives become much more difficult if not impossible to realize."
Provider feedback on Statewide HIT Goal 2 and associated Objectives	See above.
Provider feedback on Statewide HIT Goal 3 and associated Objectives	See above.
Provider feedback on Statewide HIT Goal 4 and associated Objectives	See above.
What is missing?	N/A

SMHP PROVIDER MEETING RESULTS

Meeting with Massachusetts Dental Society	
Item	**Details**
Date of Meeting	December 1, 2010
Organization Background	• Their goal is to have 65% of members enrolled in MassHealth by 2013. In a short span of 18 months, the organization was able to jump membership from 18 % to 33%. • Provide Continuing Education Services. Strong crossover b/w continuing education and government relations to educate members on new regulations. • Hold annual conference for New England with National attendance. (Yankee Conference)
Key Contact Information	David White, Director of Governmental Affairs and Grassroots Advocacy Massachusetts Dental Society 2 Willow St. Suite 200, Southborough MA, 01745 Phone: (508) 449.6025
List of Attendees	MA Dental Society: David White BDMP: David Houle, Seth Hedstrom, Joshua Slen, Nathan DesJardins
Questions for the Association/Organization	
Item	**Details**
Promotion of EHR adoption	The organization is not currently conducting provider outreaches. Future roadmap: The Society could use additional guidance and clarity on terms/eligibility and so forth...
Provider education	• No current outreaches by the Society. • Prior to the Final rules there were no defined meaningful use criteria for Dentists. There needs to be further clarification on if the final rules added any defined meaningful use criteria for dentists. • Targeted messages (for those that are EPs) with the help of MassHealth collaboration might be helpful for the MA Dental Society. • One concern we heard was that: If a Dentist already has an EHR today then will they get left behind if their system is not certified? • Mass Dental already has an internal group (Affinity) to certify

	vendors. There is a concern about how this group would or would not overlap with the State and/or Federal certifications.
Communication strategies	• MA Dental Society does already get a fairly high open rate and read rate via email by their use of the "Informz" tool. • Providers are not sitting at their computer all day, so it can be a problem to use email for everyone. • The Yankee annual conference is a great opportunity for face to face. • There is also a quarter news letter. • And a published journal. • A high number of Dentists still use faxes. • Any communication strategy will likely need to use multiple means of communication (e.g., email, phone, snail mail, fax - - providers receive communication using varying methods).
How can MassHealth best support your organization as it relates to the EHR-IP?	• EOHHS can help the MA Dental Society by providing clarification on Meaningful Use and eligibility. • Paperwork is a major frustration for Dentists. • Dentists have already had projects in the past that allowed for in-house consultation in regards to filling out extensive paperwork with good results. • Anything that MassHealth can do to streamline the paperwork involved in the new program would be very helpful. • Having a Roadmap would also be appreciated.

Questions for Providers	
Item	**Details**
Barriers to EHR adoption	• Financial barriers are a major barrier. • A very large number of Dentists are about to retire. If you are close to retirement there is not much incentive to install an EHR. If you have to keep hard copies anyway, then it reduces the attractiveness of an EHR. • 234 CMR – subsection now dictates what they want to see in the patient's record. • Also, there's more than just buying a computer system. There's other equipment. • The change is significant for both technical and cultural. • There are some significant conversion tasks, especially since Dentists offer such a large variety of services in-house, x-rays, labs, etc. • This is not a simple change and so the complexity and investment in making a major change in practice patterns is the biggest single issue.

Certified EHR adoption	David White is outreaching to some Dentists for feedback.
Meaningful use by 2015	The Society is still seeking clarification from EOHHS on this terminology.
Aware of the REC? How can MassHealth best support your organization as it relates to the EHR-IP?	Limited knowledge of the REC. It is currently unclear how Dentists are referenced in Chapter 305.
Feedback on Vision Questions	
Item	**Details**
Provider feedback on Statewide HIT Goal 1 and associated Objectives	Most important objective: 1. Assure private and secure electronic access, use and portability of protected health information by all authorized individuals.
Provider feedback on Statewide HIT Goal 2 and associated Objectives	Most important objective: 1. Adopt meaningful use measures, as defined by the federal government, for reporting purposes across all agencies.
Provider feedback on Statewide HIT Goal 3 and associated Objectives	Not important: Decrease redundant testing. Not important: Document, track and minimize episodes of futile care.
Provider feedback on Statewide HIT Goal 4 and associated Objectives	Most important objective: 1. Support health reform in the Commonwealth, by providing ready access to data and information that is necessary for identification and implementation of key reform policies and strategies, being meticulous about protecting patient information and carefully following the minimum necessary use of information standards.
What is missing?	• Issues for Dentists that serve Medicaid population are typically more administrative (missed appointments, etc.). • A lot of what the state references for studies do not have a large test population. EHR's may allow for more data to be

	leveraged. Dentists would like to use this data for Epidemiology enhancement such as: o 40 years ago many schools used to require a dental appointment to enter school .They would like to see dental disease documented state-wide. o Oral health is overall health. Diabetes is an example of where dentists may identify early signs of high blood sugar or heart disease and how this information is shared. o Fluoride vs. non-fluoride communities and dental health.

SMHP PROVIDER MEETING RESULTS

Meeting with Massachusetts Chapter of the American Academy of Pediatrics	
Item	**Details**
Date of Meeting	December 2, 2010
Organization Background	The Massachusetts Chapter of the American Academy of Pediatrics (MCAAP) is committed to the attainment of optimal physical, mental and social health for all infants, children, adolescents and young adults. To this end the members of the Academy dedicate their efforts and resources.
Key Contact Information	Cathleen Haggerty, Executive Director 781-895-9852
List of Attendees	Dr. Eugenia Marcus, Dr. Peter Kenny, Dr. Peter Rappo and Ms. Kim Hayes, CPA, CMPE
Feedback on Questions for the Association/Organization	
Item	**Details**
Promotion of EHR adoption	MCAAP promotes EHR via newsletter, e-newsletters and the home page of the Chapter's website. The newsletter is published four times per year. Electronic newsletters are sent to members monthly. The Chapter does not have EHR resources but works collaboratively with MMS and refers members to their resources. There are also Continuing Medical Education (CME) programs and REC "Summit" meetings.
Provider education	MCAAP refers providers to local resources (e.g., Regional Extension Center) and invites experts to present information at board meetings.
Communication strategies	Probably e-newsletters and the website because members can directly click on links that contains relevant information. The ARRA newsletter developed by Mass Medical Society/NEJM is a good method of communication.
How can MassHealth best support your organization as it relates to the EHR-IP?	Be available to answer questions from members and continue to periodically present information to Chapter leaders at board meetings.
Feedback on Questions for Providers	
Item	**Details**
Barriers to EHR	A lot of providers do not see the value proposition in EHRs. Folks fear the

adoption	loss in productivity. Training should be a huge portion of the implementation effort. Providers have to put up money in advance. Lots of MDs do not know what questions they should be asking (they don't know what they don't know). Docs are not even asking the right questions. There is a fear of lost productivity. It will be important to emphasize training and education as part of the implementation. Practices need to put up money in advance. Docs will have to choose and then implement a system that is not in their comfort zone. Finances are still a significant barrier. Providers find value in the "Trusted Colleague" method. You'd like to think that electronic communications would work, but trusted word of mouth works the best with EHR awareness. There are still a lot of people that do not see the value proposition in EHR. However, "the train is leaving the station." IOO's don't think it's enough money. Some of the IOO's are interesting. Beth Israel is only going to implement eClinical Works. Fallon is another IOO that is only implementing EPIC in the community.
Certified EHR adoption	One provider on the call acknowledged having a certified EHR. Dr. Marcus has used NextGen since 1996. She feels she may have been a "too early adopter." The technology has come such a long way. Providers that have implemented learn lessons and usually have some ideas about Implementation. All EMRs should be integrated between EMR and Practice Management System. You can do a lot more if properly interfaced. Don't bring over insurance information. Have clean data entry. "I won't see a patient unless the immunization record is in the record." Many systems have vaccine record modules that can track shots, etc. ePrescribing is another key module. Software has to be sufficiently fine-tuned to meet the needs of the practice. Providers have little tolerance for the ups and downs of EMR adoption. Most should adopt an incremental strategy. Dr. Kenny has had a system for 14 years (EncounterPro) and switched to (eCW) this summer. Started with billing and worked forward…one of the biggest challenges has been using templates effectively.
Meaningful use by 2015	Kim (Dr. Kenny's office) we are 85-90% to MU. We are challenged with reporting.
Aware of the REC? How can MassHealth best support your organization as it relates	Yes. Providers have joined the REC for the value in templates. We joined the REC after the meeting in Pittsfield. $250 to build a template. MassHealth needs to issue their guidelines – can MassHealth secondary be included? Need clarity on eligibility details. This is a big issue for Providers. Issuing guidelines and clarity. MassHealth secondary would help make more docs eligible. Can MassHealth

to the EHR-IP?	secondary be used to elevate eligibility? How will this percentage be determined? Based on patients seen? # of MassHealth patients assigned to a panel? How the 30% eligibility is defined. One major problem. 50% of docs are not eligible. Pediatricians have been singled out because they don't do Medicare. A lot of Pediatricians are not paying attention to this because of these numbers. It's very frustrating for Pediatricians.
Feedback on Vision Questions	
Item	**Details**
Provider feedback on Statewide HIT Goal 1 and associated Objectives	1. Equitably increase the number of providers who can demonstrate meaningful use of interoperable EHRs across all service areas, including rural, suburban and urban areas where health disparities have been identified. 2. Assure private and secure electronic access, use and portability of protected health information by all authorized individuals.
Provider feedback on Statewide HIT Goal 2 and associated Objectives	1. Adopt and promulgate a common set of Health IT enabled quality and safety measures across all payers and providers. 2. Commit to the principles that hospitals and health care providers would report quality and safety measures one way, one time and to one place, to ensure they are collected consistently and with minimum administrative burden.
Provider feedback on Statewide HIT Goal 3 and associated Objectives	1. All payers in the Commonwealth will adopt a single set of Federal standards for eligibility and claims payment processes, which will be incorporated into certified EHRs. 2. Engage patients to actively participate in managing their health information, their health and their care and encourage providers to engage with and respond to their patients.
Provider feedback on Statewide HIT Goal 4 and associated Objectives	1. Support health reform in the Commonwealth, by providing ready access to data and information that is necessary for identification and implementation of key reform policies and strategies, being meticulous about protecting patient information and carefully following the minimum necessary use of information standards.
What is important to Pediatricians that is not represented in the above?	Recognizing, valuing and paying for comprehensive services that providers provide in many ways (telephone, email, etc…efficiencies exist in these alternative methods of service provision).

SMHP PROVIDER MEETING RESULTS

Meeting with Massachusetts Hospital Association	
Item	**Details**
Date of Meeting	December 8, 2010
Organization Background	The Massachusetts Hospital Association was founded in 1936 and its members include more than 100 Massachusetts hospitals and health system members, as well as interested individuals and other healthcare stakeholders. The association's key functions include: As the primary representative of the hospital community in Massachusetts, MHA plays a central role in influencing the public policy environment. Grounded in the principle that caring for people is the primary mission of its member hospitals and health systems, MHA seeks to promote responsible public policy, encourage public accountability and foster an appropriate balance between those who provide and those who pay for healthcare services.
Key Contact Information	Daniel J. McHale, Senior Director, State Government Finance and Policy David P. Smith, Senior Director, Health Data Analysis & Research
List of Attendees	Dan McHale, David Smith, Deb Schiel, BDMP
Feedback on Questions for the Association/Organization	
Item	**Details**
Promotion of EHR adoption	MHA sponsored a major conference on ARRA/HITECH ACT & Ch. 305 in June 2009; Sec. Bigby was a speaker. MHA and MTC have cooperated for several years in the conduct of "CPOE University" program. Once ARRA was passed, MHA developed an HIT outreach program. In late 2009 there were CEO phone briefings. MHA provided a summary of the CMS HIT final rule and provided hospitals with estimated payouts for Medicaid and Medicare. MHA has a relationship with the Hospital Association of New York State that developed those estimates. MHA believes that CMS has provided excellent resources and MHA does not need to create redundant information. Also, AHA has been providing outreach services to MA hospitals. MHA hopes that MassHealth will soon provide similar clarity on its plans. David Smith also provides comments on CMS rules and the State HIT Plan and communications have been issued to members on these items. MHA has a Medical Directors group. October 2010, David did a briefing to this group as well. MHA also briefed its Trustees Advisory Council in late 2009 on this issue.

	Also have done a fair amount of work with MeHI and promoting their programs and outreach activities. Also, CHIME provides information to the members.
Provider education	The challenge is much bigger for the Eligible Providers. They have heard that Docs will rely on hospitals for EHR implementation support.
Communication strategies	Future communications have to get to a granular level of detail that provides direction and clarity on these issues, particularly with respect to registration, incentive qualification protocols and incentive payout, timing, appeals process. In-person outreach is becoming less frequent though is still very useful. Electronic communications are needed, as well as webinars and possible an in-person briefing to allow for dialogue that can be beneficial for both sides. Western MA needs outreach that would be closer to home. Not needing to drive to Burlington and/or Boston. MHA encourages MassHealth to make use of the MA Health Data Consortium CIO Forum because of their capacity for outreach and education across many health care community stakeholders. One thought would be to develop a Working Group within MHA to deal with this issue, similar in fashion to a focus group.
How can MassHealth best support your organization as it relates to the PIPP?	Uniform standards for Meaningful Use will be helpful; don't increase complexity or introduce uncertainty by promulgating additional requirements unique to the Massachusetts Medicaid program. MHA would like to see the State frontload the flow of funds to the extent possible. Having an operational HIE that is affordable and meets the needs of users that does not burden them financially or operationally is important. Frequent communication that informs decision makers in hospitals and physician offices. Clarity about what they need to do and when. State estimates of the expected the Medicaid HIT payments would be helpful to allow hospitals to financially plan for these investments. There are some federal advocacy issues hanging out there where advocacy by Massachusetts officials/policymakers could advance the cause of widespread EHR adoption: • Multi campus (CCN) issue. MHA thinks there might 12-14 institutions that could be positively affected if the law changes. • Having EHR software that is certified to meet all MU objectives even if you're not required to meet all 24 objectives of MU. (19/24). What is the impact on hospitals if they need to upgrade even if they don't plan to use all functionality?

Feedback on Questions for Providers	
Item	**Details**
Barriers to EHR adoption	It's hard to say with any precision, but there are probably at least a "handful of hospitals" that could benefit from some type of capital assistance. Some of those in distress are reluctant to be public about their need for support. MHA feels there is one area where there has been a disconnect. Federal quality measurement and quality reporting as it pertains to IT. It is clear from the ruling that there appears to be little understanding from the people that wrote that what the potential impact is on hospitals. This likely will result in much more manual data collection for EHR users than anyone anticipated. Reporting/quality measures could be a significant impediment to achieving meaningful use; at a minimum it will be far more complex and costly than had been anticipated. MHA has repeatedly urged restraint on the part of state government and private payers in promulgating unique quality measure reporting requirements outside of the common national reporting framework. More than just burdensome, it is counterproductive to care improvement. One reason why so many MediTech responses in the MeHI survey of physicians is that they may have been affiliated with community hospitals where MediTech is the dominant EHR vendor by far.
Certified EHR adoption	CCHIT announced self-certification program for hospitals this week. Many large hospitals (AMC's) have home-grown systems that will require CMS/ONC certification through this process. Status of MediTech certification plans is unclear. Given the diversity of MediTech installations, there is the possibility that hospitals will have to incure additional expense to upgrade to the products that MediTech chosses to certify or have to go through some self-certification of they retain uncertified MediTech systems. http://onc-chpl.force.com/ehrcert *"When Meditech sneezes, hospitals catch a cold."* Meditech's plans to meet the ONC certification requirements needs to be better understood.
Meaningful use by 2015	In June, AHA/MHA sent out a survey to all hospitals (developed in cooperation with ONC). MHA hopes that the survey report is issued in December or January, but it is not clear when results will be published. This should prove to be a useful resource in assessing hospitals EHR adoption plans, concerns. Through back channels, MHA has learned that: 36 acute care hospitals responded (roughly half the acute care hospitals in MA). When asked, when do you plan to apply for meaningful use? n =21, 2011 n=12, 2012 n=1, 2013 n=1, don't know

	n=1, no reply Quality measures will be a challenge to meet MU requirements. Financially distressed hospitals may struggle with this.
Aware of the REC? How can MassHealth best support your organization as it relates to the PIPP?	MHA has been working with MeHI. Bethany Gilboard, et al. MHA has helped to secure and spread the word about supplemental REC grant to work with Critical Access and rural hospitals. The REC work generally is not that applicable to what the hospitals need with regards to scale and complexity, nor was oit designed to be. It's important that the REC work well with Eligible Providers, though.
Feedback on Vision Questions	
Item	**Details**
Provider feedback on Statewide HIT Goal 1 and associated Objectives	In the opinion of MHA, Goal 1 is required for all other goals to be realized. Priority Objective 1. Equitably increase the number of providers who can demonstrate meaningful use of interoperable EHRs across all service areas, including rural, suburban and urban areas where health disparities have been identified.
Provider feedback on Statewide HIT Goal 2 and associated Objectives	Priority Objective 1. Commit to the principles that hospitals and health care providers would report quality and safety measures one way, one time and to one place, to ensure they are collected consistently and with minimum administrative burden.
Provider feedback on Statewide HIT Goal 3 and associated Objectives	Priority Objective 1. All payers in the Commonwealth will adopt a single set of Federal standards for eligibility and claims payment processes, which will be incorporated into certified EHRs. 2. Over time, decrease standardized measures of administrative costs for both payers and providers. Reduce administrative complexity and hassle will improve care.
Provider feedback on Statewide HIT Goal 4 and associated Objectives	Priority Objective 1. Develop and promote effective and accessible disease prevention, health and wellness programs.
What is important to MHA that is not represented in the above objectives?	Challenges around Quality reporting measures. Be modest in the HIE assumptions around financial value of HIE to hospitals and physicians. Most savings will accrue to payers. Concern that Providers will foot the bill at the end of the day. If HIE is

	indeed a Public Good then the initial and ongoing financing requirements need to be spread broadly across a range of stakeholders, particularly those who will benefit from its payoff in anticipated cost reductions.

Appendix F – HIT Goals and Objectives Executive Team Ranking

#	Goal	Objective	Count	Average	Weight	
1	G1-EHR	Increase the number of patients whose care is coordinated across disparate delivery systems within the state and across state boundaries.	9	4.78	43	
2	G2-Quality	Equitably increase the number of ambulatory primary care providers that have re-engineered their care processes, to better manage chronic conditions, through adoption of patient centered medical home processes and Health IT that supports evidence based care.	7	3.14	22	*
3	G2-Quality	Commit to the principles that hospitals and health care providers would report quality and safety measures one way, one time and to one place, to ensure they are collected consistently and with minimum administrative burden.	5	4.20	21	
4	G3-Efficiency	Engage patients to actively participate in managing their health information, their health and their care, and encourage providers to engage with and respond to patients.	5	3.80	19	
5	G3-Efficiency	All payers in the Commonwealth will adopt a single set of Federal standards for eligibility and claims payment processes, which will be incorporated into certified EHRs.	3	5.00	15	*
6	G1-EHR	Assure private and secure electronic access, use and portability of protected health information by all authorized individuals.	4	3.50	14	*
7	G3-Efficiency	Patients report more timely, effective and appropriate care, both virtual and face to face.	4	3.25	13	
8	G2-Quality	Adopt and promulgate a common set of Health IT enabled quality and safety measures across all payers and providers.	3	3.67	11	*
9	G4-HIE	Support health reform in the Commonwealth, by providing ready access to data and information that is necessary for identification and implementation of key reform policies and strategies, being meticulous about protecting patient information and carefully following the minimum necessary use of information standards.	4	2.25	9	*
10	G2-Quality	Over time, track and improve quality safety measures reporting from EHRs.	2	4.00	8	
11	G3-Efficiency	Decrease redundant testing.	3	2.33	7	

#	Goal	Objective	Count	Average	Weight
12	G4-HIE	Develop and promote effective and accessible disease prevention, health and wellness programs.	3	2.33	7
13	G1-EHR	Equitably increase the number of providers who can demonstrate meaningful use of interoperable EHRs across all service areas, including rural, suburban and urban areas where health disparities have been identified.	2	3.00	6
14	G3-Efficiency	Document, track and minimize episodes of futile care.	2	3.00	6
15	G4-HIE	Efficiently track and demonstrate improvement in the Commonwealth's key public health initiatives to improve the health of its population, leveraging both local and state Departments of Public Health.	2	2.00	4
16	G3-Efficiency	Over time, decrease standardized measures of administrative costs for both payers and providers.	1	3.00	3
17	G2-Quality	Leverage existing reporting infrastructure, when appropriate.	1	2.00	2
	G2-Quality	Adopt meaningful use measures, as defined by the federal government, for reporting purposes across all agencies.			

Appendix G – EHR Application Data Elements

Items for Special Enrollment Process (APPLICATION DATA)	EP/Hospital or Both	How do we create these records?	Who does initial review from the CMS R&A/MAPIR Match?	Who completes the special enrollment process?
Enrolling Provider Information:	Both			
~Legal Entity Name	Both			
~Type (Individual or Non-Individual)	Both			
~Legal Address (Number and Street; City; State; Zip Code + 4; Attention)	Both	**note:** Do we need to create the legal address information for comptroller purposes?		
-Email Address	Both			
~Phone Number	Both			
~SSN for Enrolling Provider	EP	**note:** W-9 is required for whomever expects to be reimbursed		
~TIN for: individual that will be reimbursed if different from Enrolling Provider; OR, if hospital	Both	**note:** W-9 is required for whomever expects to be reimbursed		
~Criminal Convictions? Y/N	Both			
Business Information:	Both			
~Business Name	Both			
~Type	Both			
~Business Address (Number and Street; City; State; Zip Code + 4; Attention)	Both			
~City/Town Code	Both			
~Service Phone Number	Both			
~Billing Phone Number	Both			
~Email Address	Both			
Eligibility Information:	Both			
~Provider Type	Both			
~License Number	Both			

Items for Special Enrollment Process (APPLICATION DATA)	EP/Hospital or Both	How do we create these records?	Who does initial review from the CMS R&A/MAPIR Match?	Who completes the special enrollment process?
~Board Code	Both			
~Begin Date	Both			
~End Date	Both			
Service Information:	Both			
~Information Specialties	Both			
~Institutional Salary (Y/N)	EP			
~Institution / Facility Name (1)	EP			
~Medicaid Provider ID (1)	EP			
~Institution / Facility Name (2)	EP			
~Medicaid Provider ID (2)	EP			
Group Practice Organizations	EP			
~Group Practice Name	EP			
~Medicaid Provider ID	EP			
Provider Certification	Both			
Massachusetts Substitute W-9 Form	Both			
EFT Form	Both			
National Provider Identifier (NPI) Supplement	Both			
Data Collection Form	Both			

Appendix H - Data Elements for EP Reporting

Massachusetts plans to develop and maintain a data table with all the necessary data elements to support each of the federal reporting requirements. The table will be refreshed on a monthly basis and will be available for scheduled reporting or for running ad-hoc queries.

ID#	Data Element (EP Reporting)	Brief Description	Anticipated Data Type	Source System(s)
1	NPI	National Provider Identifier.	Alphanumeric	MAPIR/MMIS
2	TIN	Tax Identification Number.	Alphanumeric	MAPIR
3	Provider Type	The provider type of the EP; Eligible Types include: Physician, Nurse Practitioner, Certified Nurse Midwife, Dentist, Physician Assistant, FQHC or RHC led by PA.	Alphanumeric	MAPIR/MMIS
4	Provider Specialty	Medicaid Provider Specialty Code consistent with CMS guidelines.	Alphanumeric	MAPIR
5	Provider Location	The same NPI can be reported for different service locations; however, if the same NPI is reported, there must be a different taxonomy, zip code+4, or physical street address reported for the various locations.	Alphanumeric	MAPIR
6	IOO Name	Implementation Optimization Organization(s) assigned by MeHI.	Alphanumeric	MeHI
7	#IOO Visits	Number of IOO visits to the Provider.	Integer	MeHI
8	Other Visits	Other relevant visits/interaction with the EP that is tracked by MeHI.	Alphanumeric	MeHI
9	Samples	Review of Payment and Provider information to develop a list of providers who should have an audit.	Uploaded Files	MeHI
10	Oversight	Provider participated in a targeted audit or other oversight activities.	Uploaded Files	MeHI
11	Audit Requires External Data	Determination that PCU audit may need additional information from HCF, Board of Hearings, etc.	Boolean (Yes/No)	PCU/MeHI
12	Describe data outside of MAPIR	List of data that needs to be requested from other sources.	Alphanumeric	N/A

ID#	Data Element (EP Reporting)	Brief Description	Anticipated Data Type	Source System(s)
13	Avg. # of 1115 Waiver Encounters over a 90-day period	Numerator: Avg. # of 1115 Waiver Encounters over a 90-day period.	Integer	MAPIR/MMIS
14	Total Number of encounters over a 90-day period	Denominator: Total Number of encounters over a 90 day period.	Integer	APCD
15	CHIP Flag/Aide Category	Flag of a Medicaid member's record as being Title XXI/CHIP.	Boolean (Yes/No)	MMIS
16	sCHIP Count	Count of Medicaid members who are Title XXI/CHIP.	Integer	MMIS
17	Results of PCU Audit	Outcomes of PCU audit visit.	Alphanumeric/Files	Provider Compliance Unit
18	2011 EHR-IP Payment	Did EP receive EHR-IP Payment in the identified year?	Boolean (Yes/No)	MAPIR
19	2011 EHR-IP AIU	Did EP claim AIU in the identified year?	Boolean (Yes/No)	MAPIR
20	2011 EHR-IP MU	Did EP claim MU in the identified year?	Boolean (Yes/No)	MAPIR
21	2011 EHR-IP Amount Paid	How much EHR-IP was paid to the EP in the identified year?	Currency	MAPIR
22	2011 EHR-IP Denied	Was the EP Denied a request for payment in the identified year?	Boolean (Yes/No)	MAPIR
23	2011 EHR-IP Denied Reason	What was the reason for the denial?	Alphanumeric	MAPIR
24	2011 EHR-IP Appeals	Did the EP file a request a formal Appeal in the identified year?	Boolean (Yes/No)	MAPIR
25	2011 EHR-IP Appeals Reason(s)	What was the reason for the appeal?	Alphanumeric	MAPIR

ID#	Data Element (EP Reporting)	Brief Description	Anticipated Data Type	Source System(s)
26	2012 EHR-IP Payment	Did EP receive EHR-IP Payment in the identified year?	Boolean (Yes/No)	MAPIR
27	2012 EHR-IP AIU	Did EP claim AIU in the identified year?	Boolean (Yes/No)	MAPIR
28	2012 EHR-IP MU	Did EP claim MU in the identified year?	Boolean (Yes/No)	MAPIR
29	2012 EHR-IP Amount Paid	How much EHR-IP was paid to the EP in the identified year?	Currency	MAPIR
30	2012 EHR-IP Denied	Was the EP Denied a request for payment in the identified year?	Boolean (Yes/No)	MAPIR
31	2012 EHR-IP Denied Reason	What was the reason for the denial?	Alphanumeric	MAPIR
32	2012 EHR-IP Appeals	Did the EP file a request for a formal Appeal in the identified year?	Boolean (Yes/No)	MAPIR
33	2012 EHR-IP Appeals Reason(s)	What was the reason for the appeal?	Alphanumeric	MAPIR
34	2013 EHR-IP Payment	Did EP receive EHR-IP Payment in the identified year?	Boolean (Yes/No)	MAPIR
35	2013 EHR-IP AIU	Did EP claim AIU in the identified year?	Boolean (Yes/No)	MAPIR
36	2013 EHR-IP MU	Did EP claim MU in the identified year?	Boolean (Yes/No)	MAPIR
37	2013 EHR-IP Amount Paid	How much EHR-IP was paid to the EP in the identified year?	Currency	MAPIR
38	2013 EHR-IP Denied	Was the EP Denied a request for payment in the identified year?	Boolean (Yes/No)	MAPIR
39	2013 EHR-IP Denied Reason	What was the reason for the denial?	Alphanumeric	MAPIR

ID#	Data Element (EP Reporting)	Brief Description	Anticipated Data Type	Source System(s)
40	2013 EHR-IP Appeals	Did the EP file a request for a formal Appeal in the identified year?	Boolean (Yes/No)	MAPIR
41	2013 EHR-IP Appeals Reason(s)	What was the reason for the appeal?	Alphanumeric	MAPIR
42	2014 EHR-IP Payment	Did EP receive EHR-IP Payment in the identified year?	Boolean (Yes/No)	MAPIR
43	2014 EHR-IP AIU	Did EP claim AIU in the identified year?	Boolean (Yes/No)	MAPIR
44	2014 EHR-IP MU	Did EP claim MU in the identified year?	Boolean (Yes/No)	MAPIR
45	2014 EHR-IP Amount Paid	How much EHR-IP was paid to the EP in the identified year?	Currency	MAPIR
46	2014 EHR-IP Denied	Was the EP Denied a request for payment in the identified year?	Boolean (Yes/No)	MAPIR
47	2014 EHR-IP Denied Reason	What was the reason for the denial?	Alphanumeric	MAPIR
48	2014 EHR-IP Appeals	Did the EP file a request for a formal Appeal in the identified year?	Boolean (Yes/No)	MAPIR
49	2014 EHR-IP Appeals Reason(s)	What was the reason for the appeal?	Alphanumeric	MAPIR
50	2015 EHR-IP Payment	Did EP receive EHR-IP Payment in the identified year?	Boolean (Yes/No)	MAPIR
51	2015 EHR-IP AIU	Did EP claim AIU in the identified year?	Boolean (Yes/No)	MAPIR
52	2015 EHR-IP MU	Did EP claim MU in the identified year?	Boolean (Yes/No)	MAPIR

ID#	Data Element (EP Reporting)	Brief Description	Anticipated Data Type	Source System(s)
53	2015 EHR-IP Amount Paid	How much EHR-IP was paid to the EP in the identified year?	Currency	MAPIR
54	2015 EHR-IP Denied	Was the EP Denied a request for payment in the identified year?	Boolean (Yes/No)	MAPIR
55	2015 EHR-IP Denied Reason	What was the reason for the denial?	Alphanumeric	MAPIR
56	2015 EHR-IP Appeals	Did the EP file a request for a formal Appeal in the identified year?	Boolean (Yes/No)	MAPIR
57	2015 EHR-IP Appeals Reason(s)	What was the reason for the appeal?	Alphanumeric	MAPIR
58	2016 EHR-IP Payment	Did EP receive EHR-IP Payment in the identified year?	Boolean (Yes/No)	MAPIR
59	2016 EHR-IP AIU	Did EP claim AIU in the identified year?	Boolean (Yes/No)	MAPIR
60	2016 EHR-IP MU	Did EP claim MU in the identified year?	Boolean (Yes/No)	MAPIR
61	2016 EHR-IP Amount Paid	How much EHR-IP was paid to the EP in the identified year?	Currency	MAPIR
62	2016 EHR-IP Denied	Was the EP Denied a request for payment in the identified year?	Boolean (Yes/No)	MAPIR
63	2016 EHR-IP Denied Reason	What was the reason for the denial?	Alphanumeric	MAPIR
64	2016 EHR-IP Appeals	Did the EP file a request for a formal Appeal in the identified year?	Boolean (Yes/No)	MAPIR
65	2016 EHR-IP Appeals Reason(s)	What was the reason for the appeal?	Alphanumeric	MAPIR
66	2017 EHR-IP Payment	Did EP receive EHR-IP Payment in the identified year?	Boolean (Yes/No)	MAPIR

ID#	Data Element (EP Reporting)	Brief Description	Anticipated Data Type	Source System(s)
67	2017 EHR-IP AIU	Did EP claim AIU in the identified year? (Needed after year 2016?)	Boolean (Yes/No)	MAPIR
68	2017 EHR-IP MU	Did EP claim MU in the identified year?	Boolean (Yes/No)	MAPIR
69	2017 EHR-IP Amount Paid	How much EHR-IP was paid to the EP in the identified year?	Currency	MAPIR
70	2017 EHR-IP Denied	Was the EP Denied a request for payment in the identified year?	Boolean (Yes/No)	MAPIR
71	2017 EHR-IP Denied Reason	What was the reason for the denial?	Alphanumeric	MAPIR
72	2017 EHR-IP Appeals	Did the EP file a request for a formal Appeal in the identified year?	Boolean (Yes/No)	MAPIR
73	2017 EHR-IP Appeals Reason(s)	What was the reason for the appeal?	Alphanumeric	MAPIR
74	2018 EHR-IP Payment	Did EP receive EHR-IP Payment in the identified year?	Boolean (Yes/No)	MAPIR
75	2018 EHR-IP AIU	Did EP claim AIU in the identified year? (Needed after year 2016?)	Boolean (Yes/No)	MAPIR
76	2018 EHR-IP MU	Did EP claim MU in the identified year?	Boolean (Yes/No)	MAPIR
77	2018 EHR-IP Amount Paid	How much EHR-IP was paid to the EP in the identified year?	Currency	MAPIR
78	2018 EHR-IP Denied	Was the EP Denied a request for payment in the identified year?	Boolean (Yes/No)	MAPIR
79	2018 EHR-IP Denied Reason	What was the reason for the denial?	Alphanumeric	MAPIR
80	2018 EHR-IP Appeals	Did the EP file a request for a formal Appeal in the identified year?	Boolean (Yes/No)	MAPIR

ID#	Data Element (EP Reporting)	Brief Description	Anticipated Data Type	Source System(s)
81	2018 EHR-IP Appeals Reason(s)	What was the reason for the appeal?	Alphanumeric	MAPIR
82	2019 EHR-IP Payment	Did EP receive EHR-IP Payment in the identified year?	Boolean (Yes/No)	MAPIR
83	2019 EHR-IP AIU	Did EP claim AIU in the identified year? (Needed after year 2016?)	Boolean (Yes/No)	MAPIR
84	2019 EHR-IP MU	Did EP claim MU in the identified year?	Boolean (Yes/No)	MAPIR
85	2019 EHR-IP Amount Paid	How much EHR-IP was paid to the EP in the identified year?	Currency	MAPIR
86	2019 EHR-IP Denied	Was the EP Denied a request for payment in the identified year?	Boolean (Yes/No)	MAPIR
87	2019 EHR-IP Denied Reason	What was the reason for the denial?	Alphanumeric	MAPIR
88	2019 EHR-IP Appeals	Did the EP file a request for a formal Appeal in the identified year?	Boolean (Yes/No)	MAPIR
89	2019 EHR-IP Appeals Reason(s)	What was the reason for the appeal?	Alphanumeric	MAPIR
90	2020 EHR-IP Payment	Did EP receive EHR-IP Payment in the identified year?	Boolean (Yes/No)	MAPIR
91	2020 EHR-IP AIU	Did EP claim AIU in the identified year? (Needed after year 2016?)	Boolean (Yes/No)	MAPIR
92	2020 EHR-IP MU	Did EP claim MU in the identified year?	Boolean (Yes/No)	MAPIR
93	2020 EHR-IP Amount Paid	How much EHR-IP was paid to the EP in the identified year?	Currency	MAPIR

ID#	Data Element (EP Reporting)	Brief Description	Anticipated Data Type	Source System(s)
94	2020 EHR-IP Denied	Was the EP Denied a request for payment in the identified year?	Boolean (Yes/No)	MAPIR
95	2020 EHR-IP Denied Reason	What was the reason for the denial?	Alphanumeric	MAPIR
96	2020 EHR-IP Appeals	Did the EP file a request for a formal Appeal in the identified year?	Boolean (Yes/No)	MAPIR
97	2020 EHR-IP Appeals Reason(s)	What was the reason for the appeal?	Alphanumeric	MAPIR
98	2021 EHR-IP Payment	Did EP receive EHR-IP Payment in the identified year?	Boolean (Yes/No)	MAPIR
99	2021 EHR-IP AIU	Did EP claim AIU in the identified year? (Needed after year 2016?)	Boolean (Yes/No)	MAPIR
100	2021 EHR-IP MU	Did EP claim MU in the identified year?	Boolean (Yes/No)	MAPIR
101	2021 EHR-IP Amount Paid	How much EHR-IP was paid to the EP in the identified year?	Currency	MAPIR
102	2021 EHR-IP Denied	Was the EP Denied a request for payment in the identified year?	Boolean (Yes/No)	MAPIR
103	2021 EHR-IP Denied Reason	What was the reason for the denial?	Alphanumeric	MAPIR
104	2021 EHR-IP Appeals	Did the EP file a request for a formal Appeal in the identified year?	Boolean (Yes/No)	MAPIR
105	2021 EHR-IP Appeals Reason(s)	What was the reason for the appeal?	Alphanumeric	MAPIR

Appendix I - Data Elements for Hospital Reporting

Massachusetts plans to develop and maintain a data table with all the necessary data elements to support each of the federal reporting requirements. The table will be refreshed on a monthly basis and will be available for scheduled reporting or for running ad-hoc queries.

D#	Data Element (Hospital Reporting)	Brief Description	Anticipated Data Type	Source System(s)
1	NPI	National Provider Identifier.	Alphanumeric	MAPIR/MMIS
2	TIN	Tax Identification Number.	Alphanumeric	MAPIR
3	CCN	CMS Certification Number.	Alphanumeric	MAPIR
4	Provider Type	The provider type of the Hospital: Acute Care Hospital, Children's Hospital.	Alphanumeric	MAPIR/MMIS
5	Provider Location	The same NPI can be reported for different service locations; however, if the same NPI is reported, there must be a different taxonomy, zip code+4, or physical street address reported for the various locations.	Alphanumeric	MAPIR
6	Avg. # of 1115 Waiver ER Visits and Discharges over a 90-day period	Numerator: Avg. # of 1115 Waiver ER Visits and Discharges over a 90 day period.	Integer	MMIS Data Warehouse
7	Total Number of ER Visits and Discharges over a 90-day period	Denominator: Total Number of ER Visits and Discharges over a 90 day period.	Integer	APCD
8	Average Length of Stay < 25 days	Average Length of Stay of Medicaid patients over the duration of the Facilities Cost Report Year must be less than 25 days.	Boolean (Yes/No)	CMS Report + DHCFP
9	CHIP Flag? Aide Category?	Flag of a Medicaid member's record as being Title XXI/CHIP.	Boolean (Yes/No)	MMIS Data Warehouse
10	What's the count of SCHIP?	State Children's Health Insurance Program.	Integer	MMIS Data Warehouse
11	Results of the Hospital Audit	Outcomes of Audit visit.	Alphanumeric	Provider Compliance Unit

WORKING DRAFT

D#	Data Element (Hospital Reporting)	Brief Description	Anticipated Data Type	Source System(s)
12	Presence of Sanctions?	Medicare (CMS R&A) sanctions, or State/other sanctions exist?	Boolean (Yes/No)	CMS R&A, Several State Systems
13	2011 Deemed?	Was the hospital approved for Medicaid incentives in the identified year? If yes, they are considered Deemed.	Boolean (Yes/No)	MAPIR/CMS R&A
14	2010 Total Inpatient Discharges	Total number of inpatient discharges.	Integer	CMS Report + DHCFP Cost Report
15	2010 Number of Inpatient Bed Days in Medicaid/1115 Waiver	Number of Inpatient Bed Days in Medicaid/1115 Waiver.	Integer	HCF Cost Report
16	2010 Number of Inpatient Bed Days in MCO	Number of Inpatient Bed Days in MCO.	Integer	HCF Cost Report - Schedule VA
17	2010 Number of Inpatient Bed Days Total	Number of Inpatient Bed Days Total.	Integer	CMS Report + DHCFP Cost Report
18	2010 Estimated Total Number of Eligible Hospital Charges	Estimated Total Number of Eligible Hospital Charges.	Integer	CMS Report + DHCFP Cost Report
19	2010 Total Charity Care	Total Charity Care.	Integer	HCF Cost Report
20	2010 Total Charges Attributable to Non-Medicaid	Total Charges Attributable to Non-Medicaid.	Currency	HCF Cost Report
21	2010 Annual Average Growth Rate	Annual Average Growth Rate.	Integer	CMS Report + DHCFP Cost Report
22	2011 EHR-IP Amount Paid	How much EHR-IP funds were paid to the EP in the identified year?	Currency	MAPIR/HCFP
23	2011 EHR-IP AIU	Did EP claim AIU in the identified year?	Boolean (Yes/No)	MAPIR
24	2011 EHR-IP MU	Did EP claim MU in the identified year?	Boolean (Yes/No)	MAPIR
25	2011 EHR-IP Denied Reason	What was the reason for the denial?	Alphanumeric	MAPIR
26	2011 EHR-IP Appeals	Did the EP file a request for a formal Appeal in the identified year?	Boolean (Yes/No)	MAPIR

WORKING DRAFT

D#	Data Element (Hospital Reporting)	Brief Description	Anticipated Data Type	Source System(s)
27	2011 EHR-IP Appeals Reason	What was the reason for the appeal?	Alphanumeric	MAPIR
28	2012 Deemed?	Was the hospital approved for Medicaid incentives in the identified year? If yes, they are considered Deemed.	Boolean (Yes/No)	MAPIR/CMS R&A
29	2011 Total Inpatient Discharges	Total number of inpatient discharges.	Integer	CMS Report + DHCFP Cost Report
30	2011 Number of Inpatient Bed Days in Medicaid/1115 Waiver	Number of Inpatient Bed Days in Medicaid/1115 Waiver.	Integer	HCF Cost Report
31	2011 Number of Inpatient Bed Days in MCO	Number of Inpatient Bed Days in MCO.	Integer	HCF Cost Report - Schedule VA
32	2011 Number of Inpatient Bed Days Total	Number of Inpatient Bed Days Total.	Integer	HCF Cost Report
33	2011 Estimated Total Number of Eligible Hospital Charges	Estimated Total Number of Eligible Hospital Charges.	Integer	CMS Report + DHCFP Cost Report
34	2011 Total Charity Care	Total Charity Care.	Integer	HCF Cost Report
35	2011 Total Charges Attributable to Non-Medicaid	Total Charges Attributable to Non-Medicaid.	Currency	HCF Cost Report
36	2011 Annual Average Growth Rate	Annual Average Growth Rate.	Integer	CMS Report + DHCFP Cost Report
37	2012 EHR-IP Amount Paid	How much EHR-IP funds were paid to the EP in the identified year?	Currency	MAPIR/HCFP
38	2012 EHR-IP AIU	Did EP claim AIU in the identified year?	Boolean (Yes/No)	MAPIR
39	2012 EHR-IP MU	Did EP claim MU in the identified year?	Boolean (Yes/No)	MAPIR
40	2012 EHR-IP Denied Reason	What was the reason for the denial?	Alphanumeric	MAPIR
41	2012 EHR-IP Appeals	Did the EP file a request for a formal Appeal in the identified year?	Boolean (Yes/No)	MAPIR
42	2012 EHR-IP Appeals Reason	What was the reason for the appeal?	Alphanumeric	MAPIR

WORKING DRAFT

D#	Data Element (Hospital Reporting)	Brief Description	Anticipated Data Type	Source System(s)
43	2013 Deemed?	Was the hospital approved for Medicaid incentives in the identified year? If yes, they are considered Deemed.	Boolean (Yes/No)	MAPIR/CMS R&A
44	2012 Total Inpatient Discharges	Total number of inpatient discharges.	Integer	CMS Report + DHCFP Cost Report
45	2012 Number of Inpatient Bed Days in Medicaid/1115 Waiver	Number of Inpatient Bed Days in Medicaid/1115 Waiver.	Integer	HCF Cost Report
46	2012 Number of Inpatient Bed Days in MCO	Number of Inpatient Bed Days in MCO.	Integer	HCF Cost Report - Schedule VA
47	2012 Number of Inpatient Bed Days Total	Number of Inpatient Bed Days Total.	Integer	HCF Cost Report
48	2012 Estimated Total Number of Eligible Hospital Charges	Estimated Total Number of Eligible Hospital Charges.	Integer	CMS Report + DHCFP Cost Report
49	2012 Total Charity Care	Total Charity Care.	Integer	HCF Cost Report
50	2012 Total Charges Attributable to Non-Medicaid	Total Charges Attributable to Non-Medicaid.	Currency	HCF Cost Report
51	2012 Annual Average Growth Rate	Annual Average Growth Rate.	Integer	CMS Report + DHCFP Cost Report
52	2013 EHR-IP Amount Paid	How much EHR-IP funds were paid to the EP in the identified year?	Currency	MAPIR/HCFP
53	2013 EHR-IP AIU	Did EP claim AIU in the identified year?	Boolean (Yes/No)	MAPIR
54	2013 EHR-IP MU	Did EP claim MU in the identified year?	Boolean (Yes/No)	MAPIR
55	2013 EHR-IP Denied Reason	What was the reason for the denial?	Alphanumeric	MAPIR
56	2013 EHR-IP Appeals	Did the EP file a request for a formal Appeal in the identified year?	Boolean (Yes/No)	MAPIR
57	2013 EHR-IP Appeals Reason	What was the reason for the appeal?	Alphanumeric	MAPIR

WORKING DRAFT

D#	Data Element (Hospital Reporting)	Brief Description	Anticipated Data Type	Source System(s)
58	2014 Deemed?	Was the hospital approved for Medicaid incentives in the identified year? If yes, they are considered Deemed.	Boolean (Yes/No)	MAPIR/CMS R&A
59	2013 Total Inpatient Discharges	Total number of inpatient discharges.	Integer	CMS Report + DHCFP Cost Report
60	2013 Number of Inpatient Bed Days in Medicaid/1115 Waiver	Number of Inpatient Bed Days in Medicaid/1115 Waiver.	Integer	HCF Cost Report
61	2013 Number of Inpatient Bed Days in MCO	Number of Inpatient Bed Days in MCO.	Integer	HCF Cost Report - Schedule VA
62	2013 Number of Inpatient Bed Days Total	Number of Inpatient Bed Days Total.	Integer	CMS Report + DHCFP Cost Report
63	2013 Estimated Total Number of Eligible Hospital Charges	Estimated Total Number of Eligible Hospital Charges.	Integer	CMS Report + DHCFP Cost Report
64	2013 Total Charity Care	Total Charity Care.	Integer	HCF Cost Report
65	2013 Total Charges Attributable to Non-Medicaid	Total Charges Attributable to Non-Medicaid.	Currency	HCF Cost Report
66	2013 Annual Average Growth Rate	Annual Average Growth Rate.	Integer	CMS Report + DHCFP Cost Report
67	2014 EHR-IP Amount Paid	How much EHR-IP funds were paid to the EP in the identified year?	Currency	MAPIR/HCFP
68	2014 EHR-IP AIU	Did EP claim AIU in the identified year?	Boolean (Yes/No)	MAPIR
69	2014 EHR-IP MU	Did EP claim MU in the identified year?	Boolean (Yes/No)	MAPIR
70	2014 EHR-IP Denied Reason	What was the reason for the denial?	Alphanumeric	MAPIR
71	2014 EHR-IP Appeals	Did the EP file a request for a formal Appeal in the identified year?	Boolean (Yes/No)	MAPIR
72	2014 EHR-IP Appeals Reason	What was the reason for the appeal?	Alphanumeric	MAPIR

WORKING DRAFT

D#	Data Element (Hospital Reporting)	Brief Description	Anticipated Data Type	Source System(s)
73	2015 Deemed?	Was the hospital approved for Medicaid incentives in the identified year? If yes, they are considered Deemed.	Boolean (Yes/No)	MAPIR/CMS R&A
74	2014 Total Inpatient Discharges	Total number of inpatient discharges.	Integer	CMS Report + DHCFP Cost Report
75	2014 Number of Inpatient Bed Days in Medicaid/1115 Waiver	Number of Inpatient Bed Days in Medicaid/1115 Waiver.	Integer	HCF Cost Report
76	2014 Number of Inpatient Bed Days in MCO	Number of Inpatient Bed Days in MCO.	Integer	HCF Cost Report - Schedule VA
77	2014 Number of Inpatient Bed Days Total	Number of Inpatient Bed Days Total.	Integer	CMS Report + DHCFP Cost Report
78	2014 Estimated Total Number of Eligible Hospital Charges	Estimated Total Number of Eligible Hospital Charges.	Integer	CMS Report + DHCFP Cost Report
79	2014 Total Charity Care	Total Charity Care.	Integer	HCF Cost Report
80	2014 Total Charges Attributable to Non-Medicaid	Total Charges Attributable to Non-Medicaid.	Currency	HCF Cost Report
81	2014 Annual Average Growth Rate	Annual Average Growth Rate.	Integer	CMS Report + DHCFP Cost Report
82	2015 EHR-IP Amount Paid	How much EHR-IP funds were paid to the EP in the identified year?	Currency	MAPIR/HCFP
83	2015 EHR-IP AIU	Did EP claim AIU in the identified year?	Boolean (Yes/No)	MAPIR
84	2015 EHR-IP MU	Did EP claim MU in the identified year?	Boolean (Yes/No)	MAPIR
85	2015 EHR-IP Denied Reason	What was the reason for the denial?	Alphanumeric	MAPIR
86	2015 EHR-IP Appeals	Did the EP file a request for a formal Appeal in the identified year?	Boolean (Yes/No)	MAPIR
87	2015 EHR-IP Appeals Reason	What was the reason for the appeal?	Alphanumeric	MAPIR

WORKING DRAFT

D#	Data Element (Hospital Reporting)	Brief Description	Anticipated Data Type	Source System(s)
88	2016 Deemed?	Was the hospital approved for Medicaid incentives in the identified year? If yes, they are considered Deemed	Boolean (Yes/No)	MAPIR/CMS R&A
89	2015 Total Inpatient Discharges	Total number of inpatient discharges.	Integer	CMS Report + DHCFP Cost Report
90	2015 Number of Inpatient Bed Days in Medicaid/1115 Waiver	Number of Inpatient Bed Days in Medicaid/1115 Waiver.	Integer	HCF Cost Report
91	2015 Number of Inpatient Bed Days in MCO	Number of Inpatient Bed Days in MCO.	Integer	HCF Cost Report - Schedule VA
92	2015 Number of Inpatient Bed Days Total	Number of Inpatient Bed Days Total.	Integer	CMS Report + DHCFP Cost Report
93	2015 Estimated Total Number of Eligible Hospital Charges	Estimated Total Number of Eligible Hospital Charges.	Integer	CMS Report + DHCFP Cost Report
94	2015 Total Charity Care	Total Charity Care.	Integer	HCF Cost Report
95	2015 Total Charges Attributable to Non-Medicaid	Total Charges Attributable to Non-Medicaid.	Currency	HCF Cost Report
96	2015 Annual Average Growth Rate	Annual Average Growth Rate.	Integer	CMS Report + DHCFP Cost Report
97	2016 EHR-IP Amount Paid	How much EHR-IP funds were paid to the EP in the identified year?	Currency	MAPIR/HCFP
98	2016 EHR-IP AIU	Did EP claim AIU in the identified year?	Boolean (Yes/No)	MAPIR
99	2016 EHR-IP MU	Did EP claim MU in the identified year?	Boolean (Yes/No)	MAPIR
100	2016 EHR-IP Denied Reason	What was the reason for the denial?	Alphanumeric	MAPIR
101	2016 EHR-IP Appeals	Did the EP file a request for a formal Appeal in the identified year?	Boolean (Yes/No)	MAPIR
102	2016 EHR-IP Appeals Reason	What was the reason for the appeal?	Alphanumeric	MAPIR

WORKING DRAFT

D#	Data Element (Hospital Reporting)	Brief Description	Anticipated Data Type	Source System(s)
103	2017 Deemed?	Was the hospital approved for Medicaid incentives in the identified year? If yes, they are considered Deemed.	Boolean (Yes/No)	MAPIR/CMS R&A
104	2016 Total Inpatient Discharges	Total number of inpatient discharges.	Integer	CMS Report + DHCFP Cost Report
105	2016 Number of Inpatient Bed Days in Medicaid/1115 Waiver	Number of Inpatient Bed Days in Medicaid/1115 Waiver.	Integer	HCF Cost Report
106	2016 Number of Inpatient Bed Days in MCO	Number of Inpatient Bed Days in MCO.	Integer	HCF Cost Report - Schedule VA
107	2016 Number of Inpatient Bed Days Total	Number of Inpatient Bed Days Total.	Integer	CMS Report + DHCFP Cost Report
108	2016 Estimated Total Number of Eligible Hospital Charges	Estimated Total Number of Eligible Hospital Charges.	Integer	CMS Report + DHCFP Cost Report
109	2016 Total Charity Care	Total Charity Care.	Integer	HCF Cost Report
110	2016 Total Charges Attributable to Non-Medicaid	Total Charges Attributable to Non-Medicaid.	Currency	HCF Cost Report
111	2016 Annual Average Growth Rate	Annual Average Growth Rate.	Integer	CMS Report + DHCFP Cost Report
112	2017 EHR-IP Amount Paid	How much EHR-IP funds were paid to the EP in the identified year?	Currency	MAPIR/HCFP
113	2017 EHR-IP AIU	Did EP claim AIU in the identified year?	Boolean (Yes/No)	MAPIR
114	2017 EHR-IP MU	Did EP claim MU in the identified year?	Boolean (Yes/No)	MAPIR
115	2017 EHR-IP Denied Reason	What was the reason for the denial?	Alphanumeric	MAPIR
116	2017 EHR-IP Appeals	Did the EP file a request for a formal Appeal in the identified year?	Boolean (Yes/No)	MAPIR
117	2017 EHR-IP Appeals Reason	What was the reason for the appeal?	Alphanumeric	MAPIR

WORKING DRAFT

D#	Data Element (Hospital Reporting)	Brief Description	Anticipated Data Type	Source System(s)
118	2018 Deemed?	Was the hospital approved for Medicaid incentives in the identified year? If yes, they are considered Deemed.	Boolean (Yes/No)	MAPIR/CMS R&A
119	2017 Total Inpatient Discharges	Total number of inpatient discharges.	Integer	CMS Report + DHCFP Cost Report
120	2017 Number of Inpatient Bed Days in Medicaid/1115 Waiver	Number of Inpatient Bed Days in Medicaid/1115 Waiver.	Integer	HCF Cost Report
121	2017 Number of Inpatient Bed Days in MCO	Number of Inpatient Bed Days in MCO.	Integer	HCF Cost Report - Schedule VA
122	2017 Number of Inpatient Bed Days Total	Number of Inpatient Bed Days Total.	Integer	CMS Report + DHCFP Cost Report
123	2017 Estimated Total Number of Eligible Hospital Charges	Estimated Total Number of Eligible Hospital Charges.	Integer	CMS Report + DHCFP Cost Report
124	2017 Total Charity Care	Total Charity Care.	Integer	HCF Cost Report
125	2017 Total Charges Attributable to Non-Medicaid	Total Charges Attributable to Non-Medicaid.	Currency	HCF Cost Report
126	2017 Annual Average Growth Rate	Annual Average Growth Rate.	Integer	CMS Report + DHCFP Cost Report
127	2018 EHR-IP Amount Paid	How much EHR-IP funds were paid to the EP in the identified year?	Currency	MAPIR/HCFP
128	2018 EHR-IP AIU	Did EP claim AIU in the identified year?	Boolean (Yes/No)	MAPIR
129	2018 EHR-IP MU	Did EP claim MU in the identified year?	Boolean (Yes/No)	MAPIR
130	2018 EHR-IP Denied Reason	What was the reason for the denial?	Alphanumeric	MAPIR
131	2018 EHR-IP Appeals	Did the EP file a request for a formal Appeal in the identified year?	Boolean (Yes/No)	MAPIR
132	2018 EHR-IP Appeals Reason	What was the reason for the appeal?	Alphanumeric	MAPIR

WORKING DRAFT

D#	Data Element (Hospital Reporting)	Brief Description	Anticipated Data Type	Source System(s)
133	2019 Deemed?	Was the hospital approved for Medicaid incentives in the identified year? If yes, they are considered Deemed.	Boolean (Yes/No)	MAPIR/CMS R&A
134	2018 Total Inpatient Discharges	Total number of inpatient discharges.	Integer	CMS Report + DHCFP Cost Report
135	2018 Number of Inpatient Bed Days in Medicaid/1115 Waiver	Number of Inpatient Bed Days in Medicaid/1115 Waiver.	Integer	HCF Cost Report
136	2018 Number of Inpatient Bed Days in MCO	Number of Inpatient Bed Days in MCO.	Integer	HCF Cost Report - Schedule VA
137	2018 Number of Inpatient Bed Days Total	Number of Inpatient Bed Days Total.	Integer	CMS Report + DHCFP Cost Report
138	2018 Estimated Total Number of Eligible Hospital Charges	Estimated Total Number of Eligible Hospital Charges.	Integer	CMS Report + DHCFP Cost Report
139	2018 Total Charity Care	Total Charity Care.	Integer	HCF Cost Report
140	2018 Total Charges Attributable to Non-Medicaid	Total Charges Attributable to Non-Medicaid.	Currency	HCF Cost Report
141	2018 Annual Average Growth Rate	Annual Average Growth Rate.	Integer	CMS Report + DHCFP Cost Report
142	2019 EHR-IP Amount Paid	How much EHR-IP funds were paid to the EP in the identified year?	Currency	MAPIR/HCFP
143	2019 EHR-IP AIU	Did EP claim AIU in the identified year?	Boolean (Yes/No)	MAPIR
144	2019 EHR-IP MU	Did EP claim MU in the identified year?	Boolean (Yes/No)	MAPIR
145	2019 EHR-IP Denied Reason	What was the reason for the denial?	Alphanumeric	MAPIR
146	2019 EHR-IP Appeals	Did the EP file a request for a formal Appeal in the identified year?	Boolean (Yes/No)	MAPIR
147	2019 EHR-IP Appeals Reason	What was the reason for the appeal?	Alphanumeric	MAPIR

WORKING DRAFT

D#	Data Element (Hospital Reporting)	Brief Description	Anticipated Data Type	Source System(s)
148	2020 Deemed?	Was the hospital approved for Medicaid incentives in the identified year? If yes, they are considered Deemed.	Boolean (Yes/No)	MAPIR/CMS R&A
149	2019 Total Inpatient Discharges	Total number of inpatient discharges.	Integer	CMS Report + DHCFP Cost Report
150	2019 Number of Inpatient Bed Days in Medicaid/1115 Waiver	Number of Inpatient Bed Days in Medicaid/1115 Waiver.	Integer	HCF Cost Report
151	2019 Number of Inpatient Bed Days in MCO	Number of Inpatient Bed Days in MCO.	Integer	HCF Cost Report - Schedule VA
152	2019 Number of Inpatient Bed Days Total	Number of Inpatient Bed Days Total.	Integer	CMS Report + DHCFP Cost Report
153	2019 Estimated Total Number of Eligible Hospital Charges	Estimated Total Number of Eligible Hospital Charges.	Integer	CMS Report + DHCFP Cost Report
154	2019 Total Charity Care	Total Charity Care.	Integer	HCF Cost Report
155	2019 Total Charges Attributable to Non-Medicaid	Total Charges Attributable to Non-Medicaid.	Currency	HCF Cost Report
156	2019 Annual Average Growth Rate	Annual Average Growth Rate.	Integer	CMS Report + DHCFP Cost Report
157	2020 EHR-IP Amount Paid	How much EHR-IP funds were paid to the EP in the identified year?	Currency	MAPIR/HCFP
158	2020 EHR-IP AIU	Did EP claim AIU in the identified year?	Boolean (Yes/No)	MAPIR
159	2020 EHR-IP MU	Did EP claim MU in the identified year?	Boolean (Yes/No)	MAPIR
160	2020 EHR-IP Denied Reason	What was the reason for the denial?	Alphanumeric	MAPIR
161	2020 EHR-IP Appeals	Did the EP file a request for a formal Appeal in the identified year?	Boolean (Yes/No)	MAPIR
162	2020 EHR-IP Appeals Reason	What was the reason for the appeal?	Alphanumeric	MAPIR

WORKING DRAFT

D#	Data Element (Hospital Reporting)	Brief Description	Anticipated Data Type	Source System(s)
163	2021 Deemed?	Was the hospital approved for Medicaid incentives in the identified year? If yes, they are considered Deemed.	Boolean (Yes/No)	MAPIR/CMS R&A
164	2020 Total Inpatient Discharges	Total number of inpatient discharges.	Integer	CMS Report + DHCFP Cost Report
165	2020 Number of Inpatient Bed Days in Medicaid/1115 Waiver	Number of Inpatient Bed Days in Medicaid/1115 Waiver.	Integer	HCF Cost Report
166	2020 Number of Inpatient Bed Days in MCO	Number of Inpatient Bed Days in MCO.	Integer	HCF Cost Report - Schedule VA
167	2020 Number of Inpatient Bed Days Total	Number of Inpatient Bed Days Total.	Integer	CMS Report + DHCFP Cost Report
168	2020 Estimated Total Number of Eligible Hospital Charges	Estimated Total Number of Eligible Hospital Charges.	Integer	CMS Report + DHCFP Cost Report
169	2020 Total Charity Care	Total Charity Care.	Integer	HCF Cost Report
170	2020 Total Charges Attributable to Non-Medicaid	Total Charges Attributable to Non-Medicaid.	Currency	HCF Cost Report
171	2020 Annual Average Growth Rate	Annual Average Growth Rate.	Integer	CMS Report + DHCFP Cost Report
172	2021 EHR-IP Amount Paid	How much EHR-IP funds were paid to the EP in the identified year?	Currency	MAPIR/HCFP
173	2021 EHR-IP AIU	Did EP claim AIU in the identified year?	Boolean (Yes/No)	MAPIR
174	2021 EHR-IP MU	Did EP claim MU in the identified year?	Boolean (Yes/No)	MAPIR
175	2021 EHR-IP Denied Reason	What was the reason for the denial?	Alphanumeric	MAPIR
176	2021 EHR-IP Appeals	Did the EP file a request for a formal Appeal in the identified year?	Boolean (Yes/No)	MAPIR
177	2021 EHR-IP Appeals Reason	What was the reason for the appeal?	Alphanumeric	MAPIR
178	IOO Name	Implementation Optimization Organization(s) assigned by MeHI.	Alphanumeric	MeHI

WORKING DRAFT

D#	Data Element (Hospital Reporting)	Brief Description	Anticipated Data Type	Source System(s)
179	#IOO Visits	Number of IOO visits to the Provider.	Integer	MeHI
180	Other Visits	Other relevant visits/interaction with the EP that is tracked by MeHI.	Alphanumeric	MeHI
181	Samples	Review of Payment and Provider information to develop a list of providers who should have an audit.	Uploaded Files	MeHI
182	Oversight	Provider participated in a targeted audit or other oversight activities.	Uploaded Files	MeHI
183	Audit Requires External Data	Determination that Permidian audit may need additional information from HCF, Board of Hearings, etc.	Boolean (Yes/No)	?
184	Describe data outside of MAPIR	List of data that needs to be requested from other sources.	Alphanumeric	N/A

WORKING DRAFT

Appendix J: Sample Hospital Payment Calculation

HOSPITAL		CCN			
Step #1- Average Growth Rate					
Year	# Prev Year	Current Year	Diff	Pct Change	
2006-2007 Acute Inpt Discharges*	6820	6306	(514)	-7.54%	
2007-2008 Acute Inpt Discharges*	6306	6104	(202)	-3.20%	
2008-2009 Acute Inpt Discharges*	6104	6110	6	0.10%	
Average Growth Rate			-	-3.55%	
**Total Acute Inpt Discharges Data Source:*	*2552-96 Report Worksheet S-3 Part I- line 12 (minus Lines 3,4,11) column 15*	*2552-10 Worksheet E-1,Part II Calculation of Reimbursement for Settlement of HIT--which will be derived by Worksheet S-3, Part I, column 15*	*Note: Hospital and MassHealth will validate that discharge exclusions i.e. normal newborns, chronic, obs stays etc. are excluded using 403 Schedule III Report*		
Step 2-Discharge Amounts	*$ per discharge*	*# of Total Acute Inpt Discharges**	*adjust*	*allowable discharges*	
year 1	$ 200	5580.000	1,149	4,431	$ 886,200.00
year 2	$ 200	5382.065	1,149	4,233	$ 846,613.03
year 3	$ 200	5191.151	1,149	4,042	$ 808,430.29
year 4	$ 200	5007.010	1,149	3,858	$ 771,601.98
**For discharges greater than 23,000 $ per discharge = $0*					
Step 3-Base Amounts	*Year 1*	*Year 2*	*Year 3*	*Year 4*	
Base Amounts	$ 2,000,000	$ 2,000,000	$ 2,000,000	$ 2,000,000	
Discharge Amounts	$ 886,200	$ 846,613	$ 808,430	$ 771,602	
Total	$ 2,886,200	$ 2,846,613	$ 2,808,430	$ 2,771,602	
Step 4-Transition factor	1	0.75	0.50	0.25	
Overall EHR Amount 4 years	$ 2,886,200	$ 2,134,960	$ 1,404,215	$ 692,900	$ 7,118,275
Step 5-Medicaid Share	FY2010				
Total Medicaid Acute Inpt Days including MCO**	3818	*** Data Source Mcaid Acute Inpt Days:*	*2552-96 Report Worksheet S-3 Part I- line 12 (minus Lines 3,4,11) column 5 -*	*Note:MassHealth will validate using MMIS and MCO Encounters to ensure that Dually eligibles and newborn days are excluded*	
Total Inpt Acute Days***	24,428	**** Data Source Total Acute Inpt Days:*	*2552-96 Report Worksheet S-3 Part I- line 12 (minus Lines 3,4,11) column 6 -*	*Note: Hospital and MassHealth will validate excluded days i.e. normal newborns, chronic, obs stays etc. are excluded using 403 Schedule III Report*	
				Line 31	Line 103
Total Charges****	$ 195,473,556	***** Data Source Total Charges:*	*2552-96 Worksheet C Part I- Column 8 line 103 minus line Column 8 line 31 Subprovider*	$ 7,223,866.00	$ 202,697,422.00
Total Charity Care/Free Care*****	$ 9,347,345	****** Data Source Charity Charges:*	*2552-96 Worksheet S10 Line 22 in future 2552-10 Worksheet S-10 Line 20*		
Medicaid Share	0.164145314				
Step #6-Mass. Payment Schedule					
Total Amount Medicaid EHR Incentive	$ 1,168,431.56				
Mass. Specific Payment Schedule		*Pct by Payment Year*	*Medicaid Incentive Payments*		
Year 1	$ 1,168,431.56	0.5	$ 584,215.78		
Year 2	$ 1,168,431.56	0.3	$ 350,529.47		
Year 3	$ 1,168,431.56	0.2	$ 233,686.31		
			$ 1,168,431.56		

Appendix K: Change Control Document

State-initiated Formatting Changes:

1. Added "Revision History" table to page i.
2. Updated page numbering in Table of Contents to reflect changes that resulted from revisions described below.
3. Corrected typos, using track changes.

The changes identified in the "State Response" sections below have been made to the SMHP using "track changes."

Comments received from CMS on June 6, 2011

General:

CMS.1 *Please clearly note in the text what documentation MassHealth will accept for AIU (e.g. contracts, receipts, data use agreements, etc).*

CMS.1 State Response:

Please see the following proposed changes to Table D.2 on pages 144-145 of the SMHP.

Original Submission (Section and page)	Proposed Change
Pre-payment Methods **(MeHI/EVOT primary, PCU, CST and secondary)** Look behind uploaded documentation (license agreement, letter from CIO, receipts, contracts, purchase orders, product validation records, etc.).	**Pre-payment Methods** **(MeHI/EVOT primary, PCU, CST and secondary)** Look behind uploaded documentation (license agreement, data use agreements, letter from CIO, receipts, contracts, purchase orders, product validation records, etc.).
Post-payment Methods **(PCU primary, MeHI/EVOT CST secondary)**	**Post-payment Methods** **(PCU)**

CMS.2 *CMS is reviewing this SMHP on behalf of the states. While CMS understands that the State will use available resources (i.e., contractors) to develop the SMHP document, it is inappropriate for the contacted vendors to brand themselves on the SMHP document. Please remove all of the contractor's branding from the document, to include all attachments and appendixes.*

CMS.2 State Response:

The state has removed all references to BDMP and proposes the following language to describe the contractor's role in developing the SMHP.

In addition, the State proposes the following change:

Original Submission (Section and page)	**Proposed Change**
Executive Summary – (p.5) MassHealth received approval from CMS of its HIT Planning Advanced Planning Document (PAPD) in May 2010. This approval allowed MassHealth to develop its State Medicaid Health Information Technology Plan (SMHP) which describes how MassHealth will implement, operate, administer and oversee the Medicaid Electronic Health Record (EHR) Incentive Payment Program.	MassHealth received approval from CMS of its HIT Planning Advanced Planning Document (PAPD) in May 2010. This approval allowed MassHealth to hire Berry, Dunn, McNeil and Parker through a competitive procurement process to assist in the development of its State Medicaid Health Information Technology Plan (SMHP). BerryDunn facilitated planning meetings, collaborated with State staff to gather specific operational processes, and assisted the State team to determine how the information would be presented in the SMHP to reflect how MassHealth will implement, operate, administer and oversee the Medicaid Electronic Health Record (EHR) Incentive Payment Program.

CMS.3 *In the SMHP, as it's a public document and needs to represent transparent and clear terms, please do not refer to the CMS system as the NLR. Please refer to it as the CMS Registration and Attestation System. This edit is being made by HP for the MAPIR screens but it should also be reflected in this SMHP. To illustrate, providers would not come up with the CMS R&A if they searched on "NLR" on our website.*

CMS.3 State Response:

Replaced all references to NLR in the SMHP document to "CMS Registration and Attestation System" or "CMS R&A" – see red line changes in the SMHP.

Comments:

CMS.4 *Page 36: Please carefully consider the language about the purpose of the incentives. Providers are not obliged to use them for EHR-related costs.*

CMS.4 State Response:

Original Submission (Section and page)	Proposed Change
A.3.1 HIT-Related Transformation (p.36) The Medicaid incentives will provide up to $63,750 over a six-year period to Eligible Professionals (EPs) to support the purchase of an EHR and/or to partially cover the upfront costs of implementation.	**A.3.1 HIT-Related Transformation (p.37)** The Medicaid incentives will provide up to $63,750 over a six-year period to Eligible Professionals (EPs) to promote the adoption and meaningful use of EHRs.

CMS.5: *Page 37: Just as the State is envisioning collection of the CHIPRA measures via HIE, the same should be considered for collection of HITECH CQM, electronically from providers for 2013 and onward.*

CMS.5 State Response:

Original Submission (Section and page)	Proposed Change
A.3.2 CHIPRA Grant Status (p.37) Under the auspices of its CHIPRA Quality Demonstration Grant, EOHHS, along with its grant partners, Children's Hospital Boston, Massachusetts Health Quality Partners, the National Initiative for Children's Healthcare Initiative and the University of Massachusetts Medical School, are undertaking an initiative to collect report and test a set of CMS-approved pediatric quality measures. These measures will be available for voluntary reporting by Medicaid programs nationally. As the work of the CHIPRA grant proceeds, the CHIPRA grant project team and the MassHealth HIT Steering Committee will coordinate on activities designed to best align the data collection and reporting efforts under HIE and the collection and reporting of the core pediatric quality measures.	**A.3.2 CHIPRA Grant Status (p.38)** Under the auspices of its CHIPRA Quality Demonstration Grant, EOHHS, along with its grant partners, Children's Hospital Boston, Massachusetts Health Quality Partners, the National Initiative for Children's Healthcare Initiative and the University of Massachusetts Medical School, are undertaking an initiative to collect report and test a set of CMS-approved pediatric quality measures. These measures will be available for voluntary reporting by Medicaid programs nationally. As the work of the CHIPRA grant proceeds, the CHIPRA grant project team and the MassHealth HIT Steering Committee will coordinate on activities designed to best align the data collection and reporting efforts under HIE and the collection and reporting of the core pediatric quality measures. In early FY2012, Massachusetts will convene a task force comprised of members of the EOHHS/MassHealth HIT Steering Committee, including the CHIPRA Grant Project Director, and IT staff to begin to develop strategies to support the electronic submission by providers through their EHRs of all required data associated with the MU CQMs beginning in 2013.

CMS.6 *Page 42: Has the State considered creating a continuity of care record or document from Medicaid claims to be consumed by providers' EHRs via the HIE, rather than just the portal option, which would require them to toggle between their EHR and the portal to get the claims history?*

CMS.6 State Response:

As part of the Claims Relay Service project, the EOHHS is considering an interface for providers' EHR systems to consume the claims history from Medicaid using continuity of care record or document standards. The state will provide more information on this initiative in its next annual submission of SMHP to CMS.

CMS.7 *Page 101-102: It's not clear that the outreach being coordinated with the REC covers all eligible providers, not just those targeted by the REC for their ONC cooperative agreement. For example, does the outreach include specialists, certified nurse-midwives, dentists, etc? How will the State ensure that non-primary care/priority providers also receive needed technical assistance and vendor support, etc?*

CMS.7 State Response:

Original Submission (Section and page)	Proposed Change
C.1.2 Goals for Provider Communication and Outreach (p.102) The overarching goal of the Communication and Marketing effort is to recruit greater than 85% of eligible health care professionals and hospitals to leverage the incentives that will enable implementation of EHR systems. These Eligible Professionals include those in private practice and those who practice at a community health center. A secondary goal is to utilize MeHI as the Regional Extension Center (REC) which will become an entity that providers/consumers can rely on to find information about EHR implementation and optimization, user guidelines, and the Medicaid EHR Incentive Payment Program. They key to the program's success is to engage, educate, and recruit Eligible Professionals and Hospitals by building awareness, creating transparency, and providing appropriate support.	**C.1.2 Goals for Provider Communication and Outreach (p.103)** The overarching goal of the Communication and Marketing effort is to recruit greater than 85% of eligible health care professionals and hospitals to leverage the incentives that will enable implementation of EHR systems using MassHealth communication staff and communication channels in conjunction with the EVOT Outreach Team. The primary role of the Outreach coordinators on the EVOT team will be informing and educating providers on the Medicaid EHR Incentive Payment Program registration, enrollment, and attestation process as well as general program requirements. They will target all eligible Medicaid provider types (including dentists, MDs and ODs both primary care and specialists, mid-level providers, and hospitals in all practice settings). During the course of their outreach effort, they will make providers aware of the technical assistance services and vendor support that are available through the REC for both priority providers and non-priority providers including specialists.

Original Submission (Section and page)	Proposed Change
	A secondary goal is to utilize MeHI as the state's designated entity, as the organization that Massachusetts providers/consumers can rely on to find information about EHR implementation and optimization, user guidelines, and both the Medicaid and Medicare EHR Incentive Payment Program requirements. The key to the program's success is to engage, educate, and recruit Eligible Professionals and Hospitals by building awareness, creating transparency, and providing appropriate support.

CMS.8 *Page 117: Change total discharges to total inpatient discharges.*

CMS.8 State Response:

Changed the language to total inpatient discharges – see red line changes on p. 101 and 117.

Changed to data elements 14, 29, 44, 59, 74, 89, 104, 119, 134, 149, and 164 in Appendix I to Total Inpatient Discharges.

Additionally we are proposing to add a comment at the start of the list of data elements necessary for the Hospital payment calculation shown in Table C.2.6.1.

Original Submission (Section and page)	Proposed Change
C.2.6 Business Process Activities (p.117) Provider (Hospital) enters information for incentive payment calculation:	**C.2.6 Business Process Activities (p.118)** A sample hospital payment calculation for Massachusetts including all appropriate data elements is included as an attachment to the SMHP (see Appendix J). Provider (Hospital) enters information for incentive payment calculation and the incentive calculation is verified and re-calculated using data obtained from the respective CMS 2552-96, 2552-10 and Massachusetts DHCFP 403 Schedule III reports:

CMS.9 *Page 118: How would a provider who is not an active biller of Medicaid, be eligible for the program when encounters for patient volume are limited to those with Medicaid payment liability?*

CMS.9 State Response:

Original Submission (Section and page)	Proposed Change
Special Provider Enrollment (p.118) In instances where a provider does not match during the initial CMS R&A to MAPIR/MMIS interface a determination will be made if the provider is not enrolled as a Medicaid provider or if the provider information within MMIS cannot be easily reconciled with CMS R&A information. For some providers a special provider enrollment will need to be performed to establish the provider as eligible for Medicaid EHR Incentive Payments.	**Special Provider Enrollment (p.119)** In instances where a provider does not match during the initial CMS R&A to MAPIR/MMIS interface a determination will be made if the provider is not enrolled as a Medicaid provider or if the provider information within MMIS cannot be easily reconciled with CMS R&A information. For some providers a special provider enrollment will need to be performed to establish the provider as eligible for Medicaid EHR Incentive Payments. In instances where billing data and MCO encounter data are not available to validate the Medicaid patient threshold information that the provider is attesting to, the state will request a report from the provider through their EHR or patient management system that shows the encounter activity for the selected 90 day period.

CMS.10 *Page 119: In this table, verification of AIU and certified EHR technology should be accomplished as a two-for-one. Any supporting documentation for one would serve as documentation for the other.*

CMS.10 State Response:

Removed the specific step for EHR Certification Number verification and combined with A/I/U Verification in Table C.2.6.2.

Original Submission (Section and page)		Proposed Change (page 120)	
Information to Verify (Page 119)	**Process and Data Source for Verification (Page 119)**	**Information to Verify**	**Process and Data Source for Verification**
A/I/U Verification	Self-Attestation in combination with verification of EHR CMS certification number. Compare selected EHR from CHPL list to paperwork uploaded into MAPIR (license copy, CIO attestation, vendor contract, etc.).	A/I/U Verification	Self-Attestation in combination with verification of EHR CMS certification number and paperwork uploaded into MAPIR (license copy, CIO attestation, vendor contract, etc.).

CMS.11 *Page 119: While not yet widely known, CMS plans to conduct meaningful use audits on all eligible hospitals, including Medicaid-only and dually-eligible hospitals. States will only have to verify the cost report and patient volume data for Medicaid-only hospitals, as appropriate.*

CMS.11 State Response:

Propose to add a sentence in support of the CMS Meaningful Use audit efforts to Table C.2.6.2. See also red line edit to Table D.2 on page 145.

Original Submission (Section and page)		**Proposed Change (page 120)**	
Information to Verify (Page 119)	**Process and Data Source for Verification (Page 119)**	**Information to Verify**	**Process and Data Source for Verification**
Meaningful Use Verified?	Hospital – if deemed by Medicare, then considered eligible for Medicaid. Plan to use CMS reports (TBD) and will incorporate MU verification into provider site visits. If not deemed, verify numerator/denominator and attestation with available data sources.	Meaningful Use Verified?	Hospital – if deemed eligible by Medicare, then considered eligible for Medicaid. While the state has the capacity to do Meaningful Use auditing, the state will support CMS' Meaningful Use auditing efforts with all eligible hospitals.

CMS.12 *Page 125: In the hospital calculation step breakdown, the State must not assume that discharges will increase by the EHs' average annual growth rate. Growth rates can be +/-, as such will affect the payment amount.*

CMS.12 State Response:

Added Appendix J, Sample Hospital Payment Calculation.

Original Submission (Section and page)	**Proposed Change**
Payment Calculation (p.125) For Hospitals the payment is calculated through a combined manual and electronic process based on available Medicare and DHCFP 403 cost report information. For purposes of the Medicaid EHR hospital incentive program, the overall EHR amount is equal to the sum over 4 years of: • The base amount (defined by statute as $**2,000,000**); plus • The discharge related amount defined as **$200** for the 1,150th through the 23,000th discharge for the first year (for subsequent years, States must assume	**Payment Calculation (p.126)** For Hospitals the payment is calculated through a combined manual and electronic process based on available CMS2552-96, CMS 2552-10, and DHCFP 403 cost report information. For purposes of the Medicaid EHR hospital incentive program, the overall EHR amount is equal to the sum over 4 years of: • The base amount (defined by statute as $**2,000,000**); plus • The discharge related amount defined as **$200** for the 1,150th through the 23,000th discharge for the first year (for subsequent years, States must assume

Original Submission (Section and page)	Proposed Change
discharges increase by the provider's average annual growth rate for the most recent 3 years for which data are available per year):	a provider's average annual growth rate (with increases and decreases in discharges) for the most recent 3 years for which data are available per year):
Hospitals will enter their information into MAPIR and MeHI/EVOT will verify the information entered and compare the data and resulting calculation to the original 403 annual cost report.	Hospitals will enter their information into MAPIR and MeHI/EVOT will verify the information entered and compare the data and re-calculate the incentive calculation using the CMS 2552-96 and the CMS 2552-10 hospital cost reports as well as the HCFP 403 Schedule III cost reports. A sample hospital payment calculation is included in Appendix J.

CMS.13 *Page 130-131: Please clarify the frequency of the payment cycle. Weekly? Monthly?*

CMS.13 State Response:

Original Submission (Section and page)	Proposed Change
C.3.6 Business Process Activities (top of p. 130) MassHealth is considering disbursing the incentive payments by EFT only to promote administrative efficiency. If so, all providers and hospitals would need to be signed up to receive an EFT payment. If MassHealth decides to make payments only by EFT, then an additional step would be added to the business process.	**C.3.6 Business Process Activities (top of p. 131)** The report of providers eligible for a payment will be processed weekly and payments will be made weekly per the state MMIS payment cycle (see p. 130 step 3 in the chart). All payments will be issued within 30 days. MassHealth is considering disbursing the incentive payments by EFT only to promote administrative efficiency. If so, all providers and hospitals would need to be signed up to receive an EFT payment. If MassHealth decides to make payments only by EFT, then an additional step would be added to the business process.

CMS.14 *Page 132-133: CMS has reservations about using the REC as part of the provider appeals process. Starting in 2012, one of the trigger events may be a negative audit finding. If the REC was both a technical assistance provider for the eligible professional, for example, and so received a milestone payment from ONC for having assisted that provider in reaching meaningful use- and is also in charge of handling the appeals process, that presents the potential for an unacceptable conflict of interest. CMS would like to see the State not have the REC in a liaison role for the administrative review and appeals processes and not utilize the REC for that function for objectivity. While described as distinct teams, it is still part of the REC organization.*

CMS.14 State Response:

We would like to clarify with CMS that it was always MassHealth's intention that the existing MassHealth Appeals and Auditing unit would be completely responsible for the Medicaid EHR Incentive Payment Program provider appeals and post-payment auditing functions. The intent of the Reconsideration/Appeals Liaison was to support the MassHealth Appeals and Auditing units in their respective activities and duties by providing files, data, records, etc. Describing MeHI EVOT as having a primary and/or secondary role in these administrative areas was not our intent and therefore we have revised these descriptions, including the workflow diagram on page 127. And in the same vein, we have eliminated the role of the Reconsideration/Appeals Liaison and revised the description of the appeals process.

To address CMS' concern, the State has eliminated the position of the reconsideration/appeals liaison within the EVOT:

- All references to an appeals liaison as part of the MeHI/EVOT Team have been removed
- 1 FTE Reconsideration and Appeals has been removed from EVOT staffing model on page 159

Additionally, the state proposes this clarification of roles:

Original Submission (Section and page)	Proposed Change
C.4.5 Business Process Description – Formal Appeals (p. 134) MeHI/EVOT will receive appropriate training by current administrative hearing staff on the specific criteria set forth in the State Adjudicatory Proceedings Act. To support this process, a member of MeHI/EVOT will be identified as the Medicaid EHR Incentive Payment Program appeals liaison to inform the Board of Hearings on the results of previous reconsideration activities related to an appeal and update status of the appeal in MAPIR.	**C.4.5 Business Process Description – Formal Appeals (p. 135)** MeHI/EVOT will receive appropriate training by current administrative hearing staff on the specific criteria set forth in the State Adjudicatory Proceedings Act. Initial provider reconsideration responsibility will be performed by the enrollment and verification analyst. Formal appeals will be handled by the appeals/hearings unit within the state. If MassHealth or Board of Hearings staff needs information from the EVOT they will contact the EVOT supervisor to gather the appropriate information.

CMS.15 *Page 144-145: It is not acceptable that the REC have a primary or secondary role in the post-payment auditing of provider attestations. Please clarify if the REC is a data source, versus performing actual oversight/auditing functions on behalf of MassHealth. As described before, even with checks and balances and agreements, if one part of the organization is providing TA and getting milestone payments for their clients having adopted certified EHR technology and eventually met meaningful use, and then the other side of the same organization is auditing if those providers were in fact meaningful users, there are implications for the whole organization that present conflicts of interest. What if a whole practice receives a negative audit finding? That may result in punitive action from ONC for the REC. And yet that REC would be involved in the provider audit or appeals process? This is one area of oversight that needs to be separated from the rest of the administrative functions that MassHealth would like to engage the REC to perform and an alternative approach needs to be proposed.*

CMS.15 State Response:

MeHI/EVOT has been removed as a responsible party for all Post Payment Audit and Monitoring Activities as shown in the red-lined edits on pages 141 and 148 and edits to Table D.2 on pages 145 and 146.

Additionally, the state proposes this clarification of roles:

Original Submission (Section and page)	**Proposed Change**
D.2 Provider Post Payment Audit and Monitoring (bottom of p. 145) MeHI/EVOT and MassHealth will work closely together to implement the post-payment audit strategy and ensure that follow-up occurs when anomalies are identified, with the MassHealth Provider Compliance Unit (PCU) leading the audit process and MeHI/EVOT providing data and support as needed. The PCU serves the Medicaid program integrity functions related to providers for MassHealth. The PCU consists of three functional areas: desk reviews which include preliminary investigations and full investigations; the recovery process; and external support. The Medicaid EHR Incentive Payment Program post-payment audit activities listed below will be integrated with on-going MassHealth PCU processes to minimize impact on providers and state staff. For example, the PCU will utilize its existing case tracking system to prepare and track case narratives for provider reviews.	D.2 Provider Post Payment Audit and Monitoring (bottom of p. 146-7) The MassHealth Provider Compliance Unit (PCU) is responsible for the Medicaid EHR Incentive Payment Program auditing process. The PCU serves the Medicaid program integrity functions related to providers for MassHealth. The PCU consists of three functional areas: desk reviews which include preliminary investigations and full investigations; the recovery process; and external support. The MeHI/EVOT will support the auditing process by providing requested documentation and information to the PCU in a timely manner. In addition, if the MeHI/EVOT has concerns about a provider, they will raise these concerns directly with the PCU. The Medicaid EHR Incentive Payment Program post-payment audit activities listed below will be integrated with on-going MassHealth PCU processes to minimize impact on providers and state staff. For example, the PCU will utilize its existing case tracking system to prepare and track case narratives for provider reviews.

CMS.16 *Page 166-167: Please note that for any of the 14 projects listed, where Medicaid is not the only payer involved, all costs will need to be allocated (e.g., APCD clinical data integration would need to be supported by all payers). Please also note that CMS will determine whether each project can be approved for either MMIS or HITECH funding based upon submission of an HIT IAPD. Approval of this SMHP does not indicate approval of funding or approach for these HIT-related projects.*

CMS.16 State Response:

Original Submission (Section and page)	Proposed Change
E.2.1.4.2 SMHP HIT Project Summaries (p. 166) Following are summary descriptions of the 14 SMHP HIT projects planned to help move MassHealth from the current Medicaid HIT environment to the future vision. It is important to note that these are the SMHP HIT projects that are essential to further the capabilities of the state-wide HIE while at the same time providing the infrastructure and technical environment required to support providers in meeting the EHR meaningful use criteria and operationalizing other aspects of the Medicaid EHR Incentive Payment Program. Other projects will be executed by EOHHS and other state entities in order to support the state's overall HIT/HIE goals and objectives.	**E.2.1.4.2 SMHP HIT Project Summaries (p. 167)** Following are summary descriptions of the 14 SMHP HIT projects planned to help move MassHealth from the current Medicaid HIT environment to the future vision. The state believes that these HIT projects are essential to further the capabilities of the state-wide HIE while at the same time providing the infrastructure and technical environment required to support providers in meeting the EHR meaningful use criteria and operationalizing other aspects of the Medicaid EHR Incentive Payment Program. Other projects will be executed by EOHHS and other state entities in order to support the state's overall HIT/HIE goals and objectives. EOHHS acknowledges that approval of the SMHP by CMS does not indicate CMS approval of funding or approach for these HIT-related projects. EOHHS will identify the appropriate funding source for each initiative and allocate costs to other payers and entities as appropriate, per the CMS State Medicaid Directors letter of May 18, 2011.

Additional Clarifications to the SMHP:

EOHHS would like to clarify that providers will receive email notifications as to whether or not their incentive payments have been approved or denied. We are removing instances where we reference notifications through letters on the pages below.

Original Submission (Section and page)	Proposed Change
C.2 Provider Enrollment and Eligibility Verification (p. 113) *The notification that is sent to the provider (via email or via letter) will include a reminder that Medicaid EHR Incentive Payments are viewed as taxable income by the IRS.*	**C.2 Provider Enrollment and Eligibility Verification (p. 114)** *The notification that is sent to the provider (via email) will include a reminder that Medicaid EHR Incentive Payments are viewed as taxable income by the IRS.*
C.2.6 Provider Enrollment and Eligibility Verification Business Process Activities (p. 123) If all information and verifications result in a determination of "eligible" the provider will receive a notification (e-mail/letter) indicating that their application is approved, and the provider can expect to receive an EHR Incentive Payment during the next regularly scheduled payment cycle.	**p. 124** If all information and verifications result in a determination of "eligible" the provider will receive a notification (e-mail) indicating that their application is approved, and the provider can expect to receive an EHR Incentive Payment during the next regularly scheduled payment cycle.
C.2.6 Provider Enrollment and Eligibility Verification Business Process Activities (p. 123) If the application and/or resulting verification process results in finding that the EP or Hospital is not eligible, MAPIR will generate a notice (e-mail/letter) to providers that will:	**p. 124** If the application and/or resulting verification process results in finding that the EP or Hospital is not eligible, MAPIR will generate a notice (e-mail) to providers that will:
C.3.6 Payment Processing Business Process Activities (p. 129) The Provider is notified via email and letter that their application has been reviewed and is preliminarily approved for payment, subject to final pre-payment verification.	**p. 130** The Provider is notified via email that their application has been reviewed and is preliminarily approved for payment, subject to final pre-payment verification.
C.3 Payment Processing Business Process- Flow Chart (p. 132) MeHI/EVOT notifies provider that application has been reviewed and is ready for payment through letter and email	**p. 133 (box to the right of the green trapezoid)** MeHI/EVOT notifies provider that application has been reviewed and is ready for payment through email