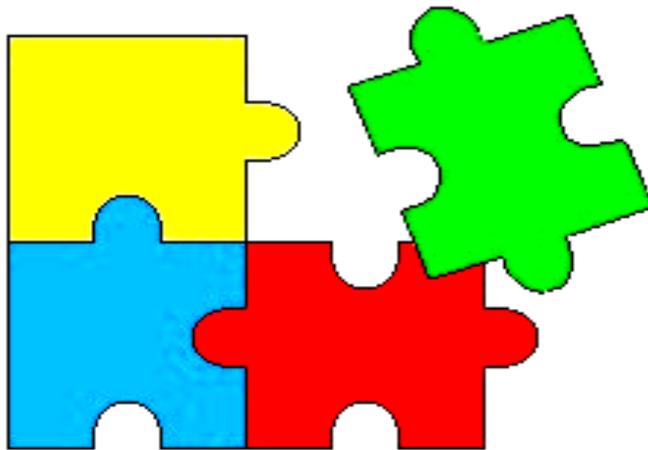


**TRANSFORMING HEALTH CARE DELIVERY THROUGH THE USE  
OF INFORMATION TECHNOLOGY:**

***THE ROLE OF THE DEPARTMENT OF PUBLIC WELFARE, OFFICE  
OF MEDICAL ASSISTANCE PROGRAMS***

**November 17, 2009**



Please visit the Medical Assistance Health IT website at:

<http://www.dpw.state.pa.us/PartnersProviders/MedicalAssistance/MAHITI/>

Email questions or comments to the PW MA Health IT Initiative at:

[ra-mahealthit@state.pa.us](mailto:ra-mahealthit@state.pa.us)

## Table of Contents

Glossary .....	ii
Executive Summary .....	iv
Overview.....	5
ARRA of 2009: Opportunities to Implement Electronic Health Records .....	7
Administrative Funds for Medicaid.....	9
Incentive Payments to Eligible Providers.....	9
Pennsylvania Medical Assistance’s Vision and Role .....	12
FY 2009: Stage 1 - Planning and Design Begins.....	14
Health Information Technology Vision .....	14
Outreach, Education and Engagement .....	14
HIT Environmental Assessment.....	16
The DESIGN .....	17
Preliminary Medical Assistance HIT Strategic Plan .....	19
Benefits – Stage 1 .....	19
FY 2010: Stage 2 - Construction Begins .....	20
Health Information Exchanges .....	20
Pennsylvania Health Information Exchange .....	21
Electronic Quality Improvement Projects .....	21
Methods and Evaluation Tools to Reach Improved Care.....	21
Continued Outreach and Education.....	21
Strategic Plan.....	22
Benefits – Stage 2.....	22
FY 2011: Stage 3 - Utilization Begins.....	23
FY 2012 – FY 2015: Stage 4 - Maintaining Operations.....	24
Summary .....	25

## Glossary

- ARRA: American Recovery and Reinvestment Act of 2009
- CCHIT: Certification Commission for Health Information Technology
- CMSO: Center for Medicaid and State Operations
- CMS: Centers for Medicare and Medicaid Services
- DESIGN: **D**evelop **E**QUIPs, **S**upport **I**nitiatives, **G**et **N**umbers. A use case approach that links an Electronic Quality Improvement Project (EQUIP) to Medical Assistance quality initiatives and results in that project being evaluated using quantifiable measures or METRICS (Methods and Evaluation Tools to Reach Improved Care). The purpose of the Health Information Technology (HIT) DESIGN is to assist providers in reaching and demonstrating meaningful use while allowing consumers to learn how EHRs that are linked to a Medical Assistance initiative can improve health outcomes.
- EHR: Electronic Health Record. An electronic record of patient health information gathered from one or more encounters in any care delivery setting that includes patient demographics, progress notes, problems, medications, vital signs, past medical history, immunizations, laboratory data and radiology reports. An EHR is created by linking health information between providers that is then available through a health information exchange (HIE). The EHR has the ability to provide a complete record of a clinical patient encounter, as well as supporting other care-related activities directly or indirectly via interface, including evidence-based decision support, quality management and outcomes reporting.
- EMR: Electronic Medical Record. An EMR takes paper medical records and puts them onto an electronic file that is maintained in a secure database. An EMR is specific to each patient, contains all health-related information for that patient and is created, managed and consulted by authorized clinicians and staff within one health care organization.
- EQUIP: Electronic Quality Improvement Project. A project developed and designed in collaboration with providers to assist in the improvement of services to consumers while allowing the providers to demonstrate meaningful use.
- GOHCR: Governor's Office of Health Care Reform. Visit [www.ohcr.state.pa.us](http://www.ohcr.state.pa.us) for additional information.

- HIE:** Health Information Exchange. The sharing of clinical and administrative data across health care institutions and providers.
- HIT:** Health Information Technology. HIT allows comprehensive management of medical information and its secure exchange between health care consumers and providers.
- MAAC:** Medical Assistance Advisory Committee. Visit [www.dpw.state.pa.us](http://www.dpw.state.pa.us) for additional information.
- METRICS:** Methods and Evaluation Tools to Reach Improved Care. The tools used to evaluate data available from health information systems and locally available sources.
- OMAP:** Pennsylvania Office of Medical Assistance Programs. Visit [www.dpw.state.pa.us](http://www.dpw.state.pa.us) for additional information.
- ONC:** The Office of the National Coordinator for Health Information Technology.
- PHIX:** Pennsylvania Health Information Exchange. A statewide utility that will connect regional HIE's and integrated health systems.
- Use Case:** A use case is a description of how providers will perform their work. It describes a task or a series of tasks that providers will accomplish using the software, [electronic medical and health records], forms, checklists, mentors and other resources, and includes the responses of the software to providers' actions.

## Executive Summary

For many years, Pennsylvania has been a national leader in health care, pursuing a variety of strategies to improve access to, quality of and affordability of care. Pennsylvania's Medicaid program, Medical Assistance (MA), has implemented a long list of initiatives to improve the quality of care delivered to MA consumers. The Department of Public Welfare's (Department's) Office of Medical Assistance Programs (OMAP), Pennsylvania's Medicaid agency, has recognized health information technologies (HIT) as an element key to the long-term transformation of the health care delivery system.

Recent Federal initiatives present opportunities for OMAP to further its commitment to improving access to, quality of and efficiency of the care delivered to MA consumers. The American Recovery and Reinvestment Act (ARRA) of 2009 appropriated substantial funds to assist states with development and implementation of initiatives that give providers real-time access to electronic health information via electronic health records (EHRs) transmitted through a health information exchange (HIE).

Thus, OMAP has developed an ARRA HIT vision:

***To improve the quality and coordination of care by connecting providers to patient information at the point of care through the meaningful use of EHRs***

MA will achieve this vision by actively encouraging the adoption of HIT through a variety of means, such as developing and evaluating electronic quality improvement projects (EQUIPs) that promote the meaningful use of EHRs.

OMAP has developed a proposed approach to implementing this vision. In short, OMAP proposes to employ a four-stage process:

- Stage 1: Planning and Design Begins (FY 2009)
- Stage 2: Construction Begins (FY 2010)
- Stage 3: Utilization Begins (FY 2011)
- Stage 4: Maintaining Operations (FY 2012 – FY 2015)

Through collaboration with stakeholders – via a listening tour and comments submitted via email in response to this paper – OMAP will refine its proposed approach, with the goal of implementing our HIT vision by 2015.

## Overview

Pennsylvania is an acknowledged leader in improving health care for its residents. In 2007, Governor Rendell's *Prescription for Pennsylvania* recommended a set of strategies to address access to, quality of and affordability of health care. Pennsylvania's Medicaid program, Medical Assistance (MA), has aggressively pursued many of these strategies, including a pay for performance (P4P) program to increase quality, reductions in health care spending for preventable serious adverse events and redesign of methods of delivering care to individuals with chronic conditions. Throughout these efforts, MA recognized health technology as a cornerstone in the long-term transformation of the health care delivery system. A key example is MA's implementation of e-prescribing beginning in January 2010, targeted for implementation in Summer 2010.

The American Recovery and Reinvestment Act (ARRA) of 2009 recognized states' efforts in the area of health information technology (HIT) and appropriated more than \$45 billion to assist in electronically transforming the health care system. Approximately \$17 billion of these federal funds are allocated for state Medicaid programs to support authorized real-time access by providers to electronic health information via electronic health records (EHRs) transmitted through a health information exchange (HIE). Two types of funding allocated in the ARRA for implementation of HIT initiatives are:

- **Administrative Funds:** Federal matching funds to help State Medicaid agencies pay for administrative costs related to implementation and oversight of EHR initiatives
- **Provider Incentive Payments:** Funds for state Medicaid agencies to distribute to eligible providers to incentivize HIT implementation and exchange of EHRs

## Office of Medical Assistance Programs' Vision and Goals

MA's vision and strategy for implementing HIT initiatives will allow for us to be a leader in using electronic health care information to improve the quality and cost-effectiveness of service delivery for MA consumers. The Department of Public Welfare's (Department's) Office of Medical Assistance Programs' (OMAP's) HIT vision is

*To improve the quality and coordination of care by connecting providers to patient information at the point of care through the meaningful use of EHRs*

Our goals include increased quality, awareness and coordination, as well as and system redesign.

### **Rationale and Proposed Approach**

OMAP will use ARRA funding to implement HIT initiatives, specifically to develop an infrastructure that supports implementation and use of EHRs by MA providers. The EHR exchange implemented for the MA Program will ultimately link with the Pennsylvania Health Information Exchange (PHIX), a statewide utility that will connect regional HIEs and integrated health systems. The Governor's Office of Health Care Reform (GOHCR) is presently pursuing a technical support contract for the PHIX.

Exhibit 1 below highlights some of the anticipated benefits of implementing EHRs. Exhibit 2 provides an overview and basic elements of four stages MA has preliminarily identified for implementing our HIT vision and achieving our goals.

## Exhibit 1: Benefits of Implementing Electronic Health Records

Current System of Medical Health Information	
<p>Clinical information is maintained on paper or in various electronic formats specific to each provider.</p> <ul style="list-style-type: none"> <li>• Increases difficulty in accessing current and historical medical information for a patient, resulting in fragmented access to consumers' full medical information</li> <li>• Increases difficulty in coordinating service delivery</li> <li>• Increases potential for unnecessary or duplicate tests to be performed</li> <li>• Increases potential for adverse drug interactions and events to occur</li> <li>• Requires more time for the patient to give and the provider to record a complete medical history at the time of each medical encounter</li> <li>• Decreases potential for life saving medical history to be available in emergency situations</li> <li>• Increases difficulty for providers and/or patients to track health care services over time and monitor scheduled times for preventive care or ongoing adherence to treatment of chronic conditions</li> </ul>	
Health Care System after Implementation of Electronic Health Records	
<p><b>For Providers, EHR:</b></p> <ol style="list-style-type: none"> <li>1) Improves communication with patients and other providers               <ol style="list-style-type: none"> <li>a) Eases process of documenting communication with patients</li> <li>b) Provides greater ability to review previously documented communication with patients</li> <li>c) Enhances ability to outreach to patients regarding both preventive care (e.g., immunizations and routine tests) and adherence to chronic care needs (e.g., for diabetics, cardiac care, other complex and/or chronic health care conditions)</li> </ol> </li> <li>2) Provides ability to send prescriptions electronically to pharmacies               <ol style="list-style-type: none"> <li>a) Reduces errors due to handwriting</li> <li>b) Reduces adverse drug interactions through the use of e-prescribing</li> <li>c) Reduces administrative burden</li> </ol> </li> <li>3) Provides ability to order tests and send referrals electronically               <ol style="list-style-type: none"> <li>a) Reduces paperwork</li> <li>b) Expedites receipt of results</li> <li>c) Reduces duplication of tests through electronic transmission</li> </ol> </li> <li>4) Increases access to immediate decision support tools (e.g., clinical guidelines)</li> <li>5) Reduces time to chart patient information and standardize patient health status documentation</li> </ol>	<p><b>Example</b></p> <ul style="list-style-type: none"> <li>• <i>A patient and her parent arrive at an appointment with a specialist. The patient has had a chronic cough and fatigue for several weeks. The parent knows that a chest x-ray was performed and was negative but does not have the results for the blood tests that were done. She also knows that her daughter has been on multiple medications for asthma as well as on antibiotics but cannot remember the names of each and has only brought one of the medications with her to the appointment. Under the current system, the specialist has limited information. Office staff must reach out to other health care providers to track down the missing information or reorder the blood tests and ask the mother to contact them with a complete list of medications. A follow-up visit may be necessary when more complete information is available. A statewide system of EHRs would change this situation. The patient's prescriptions and lab results could be accessed and reviewed by the specialist at the time of the appointment so that his/her treatment advice could be given during that visit based on a more complete medical history.</i></li> </ul>

6) Improves ability to access records in an emergency	
7) Decreases incidence of duplicate tests	

**Exhibit 1: Benefits of Implementing Electronic Health Records**

**Current System of Medical Health Information**

Clinical information is maintained on paper or in various electronic formats specific to each provider.

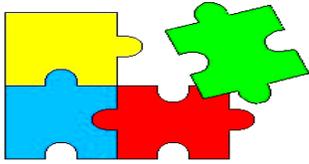
- Increases difficulty in accessing current and historical medical information for a patient, resulting in fragmented access to consumers’ full medical information
- Increases difficulty in coordinating service delivery
- Increases potential for unnecessary or duplicate tests to be performed
- Increases potential for adverse drug interactions and events to occur
- Requires more time for the patient to give and the provider to record a complete medical history at the time of each medical encounter
- Decreases potential for life saving medical history to be available in emergency situations
- Increases difficulty for providers and/or patients to track health care services over time and monitor scheduled times for preventive care or ongoing adherence to treatment of chronic conditions

**Health Care System after Implementation of Electronic Health Records**

<b>For Providers, EHR:</b>	<b>Example</b>
<ul style="list-style-type: none"> <li>8) Improves communication with patients and other providers               <ul style="list-style-type: none"> <li>a) Eases process of documenting communication with patients</li> <li>b) Provides greater ability to review previously documented communication with patients</li> <li>c) Enhances ability to outreach to patients regarding both preventive care (e.g., immunizations and routine tests) and adherence to chronic care needs (e.g., for diabetics, cardiac care, other complex and/or chronic health care conditions)</li> </ul> </li> <li>9) Provides ability to send prescriptions electronically to pharmacies               <ul style="list-style-type: none"> <li>a) Reduces errors due to handwriting</li> <li>b) Reduces adverse drug interactions through the use of e-prescribing</li> <li>c) Reduces administrative burden</li> </ul> </li> <li>10) Provides ability to order tests and send referrals electronically               <ul style="list-style-type: none"> <li>a) Reduces paperwork</li> <li>b) Expedites receipt of results</li> <li>c) Reduces duplication of tests through electronic transmission</li> </ul> </li> <li>11) Increases access to immediate decision support tools (e.g., clinical guidelines)</li> <li>12) Reduces time to chart patient information and standardize patient health status documentation</li> </ul>	<ul style="list-style-type: none"> <li>• <i>A patient and her parent arrive at an appointment with a specialist. The patient has had a chronic cough and fatigue for several weeks. The parent knows that a chest x-ray was performed and was negative but does not have the results for the blood tests that were done. She also knows that her daughter has been on multiple medications for asthma as well as on antibiotics but cannot remember the names of each and has only brought one of the medications with her to the appointment. Under the current system, the specialist has limited information. Office staff must reach out to other health care providers to track down the missing information or reorder the blood tests and ask the mother to contact them with a complete list of medications. A follow-up visit may be necessary when more complete information is available. A statewide system of EHRs would change this situation. The patient’s prescriptions and lab results could be accessed and reviewed by the specialist at the time of the appointment so that his/her treatment advice could be given during that visit based on a more complete medical history.</i></li> </ul>

- |  |
|--|
| <ul style="list-style-type: none"> <li>13) Improves ability to access records in an emergency</li> <li>14) Decreases incidence of duplicate tests</li> </ul> |
|--|

**Exhibit 2: Overview of Medical Assistance Health Technology Strategy – Key Milestones**



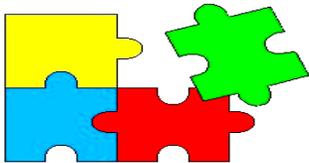
**2009: Stage 1 – Planning and Design Begins**

- Develop MA’s HIT vision
- Conduct initial outreach, education and engagement – listening tours
- Conduct an environmental assessment
- Work with stakeholders to identify the components of a certified EHR
- Implement the HIT DESIGN (Develop EQUIPs, Support Initiatives, Get Numbers)
- Collaborate to develop a strategic plan



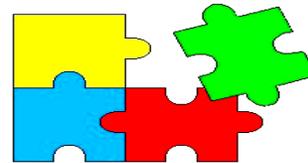
**2010: Stage 2 – Construction Begins**

- Identify existing and emerging HIEs and partnering opportunities
- Continue to develop EQUIPs
- Develop METRICs (Methods and Evaluation Tools to Reach Improved Care) to measure providers’ meaningful use of EHRs
- Update the MA strategic plan based on additional provider outreach and the definition of meaningful use under federal guidelines
- Conduct continued outreach, education and engagement



**2011: Stage 3 – Utilization Begins**

- Issue and monitor incentive payments to MA providers
- Begin to implement EQUIPs that incorporate 2013 objectives for meaningful use
- Begin to measure results of the EQUIPs and develop proposed changes in clinical care
- Begin auditing processes for provider use of incentive payments



**2012 - 2015: Stage 4 – Maintaining Operations**

- Use METRICs to leverage federal HIT funding for incentive payments and initiatives
- Expand HIE opportunities
- Evaluate, expand and enhance EQUIPs and clinical decision making metrics and quality reporting
- Explore ways to provide personal health information to MA consumers to enhance quality of care

## Collaboration with Stakeholders

Effectively leveraging the ARRA funds to pursue an endeavor as complex as the implementation of EHRs will require insights from and collaboration with multiple stakeholders within the Commonwealth, including the Pennsylvania health care community and Commonwealth residents. The intent of this discussion paper is to provide stakeholders with:

- High-level information about the ARRA and its role in facilitating the adoption of HIT and use of EHRs
- A description of MA's anticipated role in implementing and administering ARRA-related HIT initiatives and in incentivizing adoption of EHRs to improve service delivery to MA consumers

Throughout the discussion paper, bolded language represents areas where we particularly request stakeholders to comment; however, MA appreciates comments stakeholders will have to offer about any components of our proposed approach. We look forward to a collaborative process in finalizing an approach for implementing our HIT vision by 2015, and welcome comments and recommendations from stakeholders now and continuously as we work to further identify and define our proposed approach.

For more information, including issue papers specific to stakeholders, detail about the ARRA and its impact on stakeholder groups, visit the Medical Assistance Health IT website at:

<http://www.dpw.state.pa.us/PartnersProviders/MedicalAssistance/MAHITI/>

MA will also conduct a listening tour to introduce our proposed initiatives and to offer an opportunity for stakeholders to provide comments and recommendations.

***Please email any questions or comments about our proposed approach or the ARRA to: [ra-mahealthit@state.pa.us](mailto:ra-mahealthit@state.pa.us).***

## **ARRA of 2009: Opportunities to Implement Electronic Health Records**

With the passing of the ARRA of 2009, the federal government has allocated funding to distribute to state Medicaid agencies for the implementation of HIT and the exchange of EHRs. This is a unique opportunity for Pennsylvania to obtain funding not only to expand the Commonwealth's efforts in implementing HIT initiatives but also to help offset the costs to MA providers of implementing the electronic information systems required to support EHRs.

Use of EHRs will:

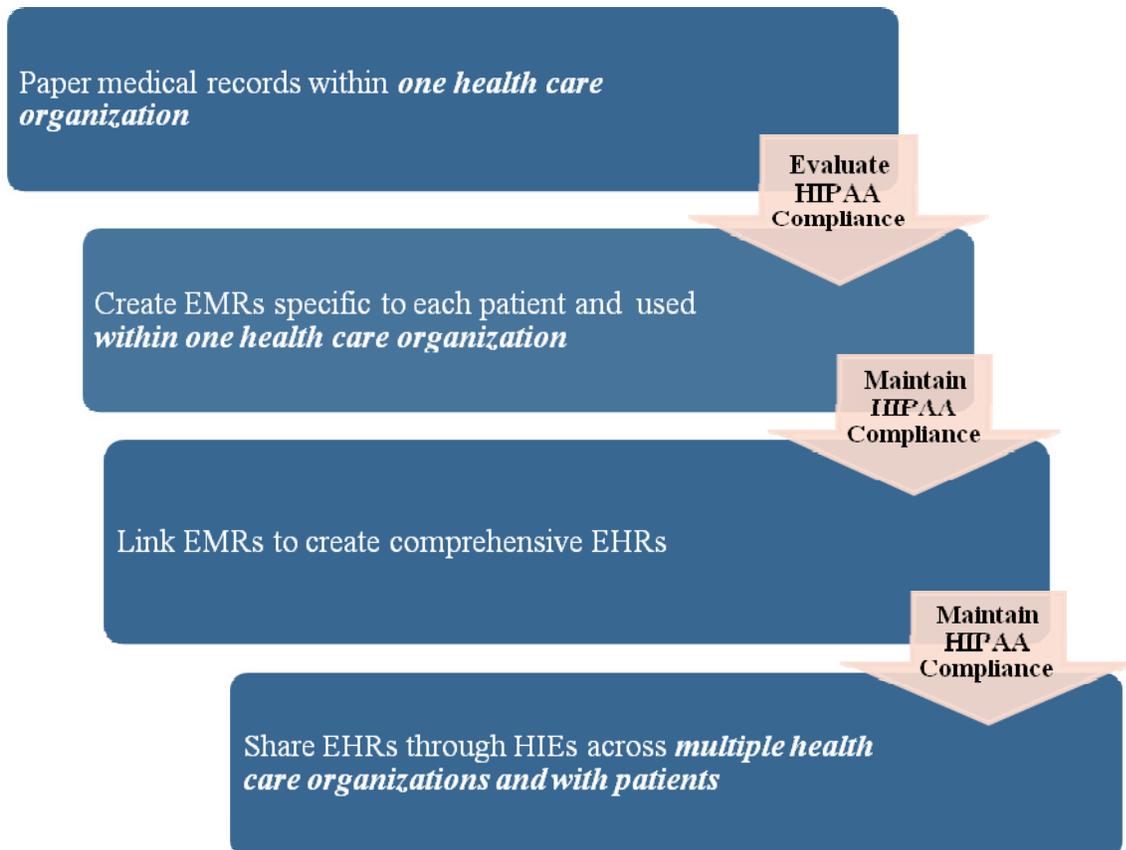
- Allow providers real-time access to accurate and complete patient information in a format that can be universally and securely exchanged
- Enhance opportunities to save lives and improve outcomes by increasing providers' real-time access to medical histories and through the use of electronic quality improvement projects (EQUIPs), as described later
- Provide medical science with invaluable data to assess outcomes and determine best practices as well as the information to monitor the quality of health care

As shown in Exhibit 3 below, the creation of EHRs that can be shared among providers starts with conversion of paper medical records to provider-specific electronic medical records (EMRs). EMRs are essentially paper medical records kept within each point of service that have been converted to an electronic format. An EMR is specific to each patient, contains all the health-related information for that patient and is created, managed and consulted by authorized clinicians and staff within one health care organization.

To maximize the effectiveness for patients, however, health records must contain information about all of the services a patient has received from all of his or her providers, including physicians, hospitals, labs and pharmacies. To achieve this level of effectiveness, EMRs are then linked to create a comprehensive EHR by creating a data format that can be used across multiple health care settings. A comprehensive EHR allows health care providers to access a patient's complete medical history, including prior health care services, regardless of provider or place of service. An EHR is created by linking health information between providers and sending that information to providers through a HIE. Thus, EHRs provide the clinical picture necessary for a

provider to make a complete evaluation of the patient’s care needs and services. An EHR would improve service coordination, quality and efficiency by reducing potential for duplication of services, promoting appropriate use and prescribing of additional services and enhancing coordination of care and more informed service delivery among providers and between providers and patients. In addition, the EHR provides a single source of medical information to patients.

**Exhibit 3: Key Steps in the Implementation of Electronic Health Records**



MA is reviewing several opportunities using MA provider networks to assist with the development and implementation of HIEs. One of these opportunities is using HealthChoices managed care organizations’ (MCOs’) provider networks for initial implementation of EHRs for MA consumers, with future expansion to the provider network of ACCESS Plus, an enhanced primary care case management program.<sup>1</sup> By working with HealthChoices MCOs and the ACCESS Plus contractor, MA can more efficiently work to reach providers and MA consumers and launch EHRs on a more expansive level. These programs will initially serve as the EHR

<sup>1</sup> Approximately 900,000 MA consumers are enrolled in HealthChoices. Go to [www.dpw.state.pa.us](http://www.dpw.state.pa.us) for additional information about the HealthChoices and ACCESS Plus programs.

exchange for MA; and, ultimately, they will link with the PHIX, a statewide utility that will connect regional HIEs and integrated health systems.<sup>2</sup>

As discussed earlier, the ARRA provides funding for both state Medicaid agencies and for eligible providers to encourage the adoption and meaningful use of EHRs. State Medicaid agencies are eligible to receive federal matching funds to help pay for administrative costs related to EHR initiatives. The ARRA also establishes provider incentive payments for HIT implementation and the exchange of EHRs.

### **Administrative Funds for Medicaid**

Medicaid administrative funds are made available through the ARRA for states to:

- Pursue programs to encourage the adoption of certified EHR technology to promote quality and exchange of health care information<sup>3</sup>
- Track meaningful use of EHRs by Medicaid providers
- Conduct adequate oversight of the program, including tracking of provider incentive payments

### **Incentive Payments to Eligible Providers**

The ARRA provides funding of provider incentives for HIT implementation and the exchange of EHRs through both the Medicare and Medicaid programs. Providers who receive incentives through the Medicaid program must waive their right to the Medicare program incentive payment. Pennsylvania's MA Program will make incentive payments to eligible providers for the net average allowable cost of implementing EHR systems, up to a possible \$63,750, over a six-year period, for each eligible provider who has adopted certified EHR systems and who meet statutory requirements for meaningful use.<sup>4,5</sup> The Centers for Medicare and Medicaid Services (CMS) is currently developing the specific definition of meaningful use and is expected to

---

<sup>2</sup> Additional information about the PHIX is available at: <http://www.rxfopa.com/phix.html>.

<sup>3</sup> As of November 10, 2009, the Department of Health and Human Services (HHS) has not published a definition of certified EHRs under the ARRA. HHS will issue regulations defining certified technology by December 31, 2009.

<sup>4</sup> The Secretary of HHS shall study the average costs to eligible Medicaid providers for the purchase and initial implementation and upgrade of certified EHR technology.

<sup>5</sup> Pediatricians shall receive 2/3 of the average allowable cost, as determined by the Secretary of HHS, which could be as much as \$42,500.

finalize it in early 2010. The ARRA indicates that meaningful use of an EHR system for eligible providers under the Medicare program includes at a minimum three key components:

- The EHR system must be certified and for eligible professionals must include e-prescribing capabilities
- The EHR system must be able to exchange clinical data with other systems
- The EHR system must produce reports using various yet-to-be-defined clinical and quality metrics

ARRA provisions for Medicaid allow states to vary from this definition, but indicate that after the first year of payment, eligible providers must “demonstrate meaningful use of certified EHR technology through a means approved by the State and acceptable to the Secretary.”<sup>6</sup> The means may be based upon those used to determine meaningful use under Medicare. In addition, the ARRA allocates funding to determine whether existing systems meet meaningful use criteria, and if not, whether modifications can be made to meet the criteria.

The eligibility criteria and general payment structure for payments to providers have been established at the federal level:

- MA has the option to make payments to non-hospital based providers to encourage the adoption and use of EHRs. Eligible non-hospital based providers under Medicaid must be physicians, dentists, certified nurse midwives, nurse practitioners or physician assistants practicing in a rural health clinics or Federally Qualified Health Centers.
- MA will develop incentive payments for hospitals which are formula-driven and will be paid to the hospital in no fewer than three payments beginning in 2011 and will continue over a maximum of six years.

While all sectors of the health care system will be able to use HIT to transform the delivery of health care services, this document focuses on the role of MA in this delivery system transformation and our vision for moving forward. The primary role of MA under the ARRA is

---

<sup>6</sup> Eligible Medicaid providers may receive incentive payments for their first year of participation for implementation and prior to meeting meaningful use criteria.

the payment and compliance auditing of incentive payments to providers. To meet federal requirements and timelines for making provider incentive payments, it is necessary that MA begin now with stakeholder involvement in exploring options for moving forward.

## Pennsylvania Medical Assistance's Vision and Role

The implementation of EHRs is a significant challenge, bringing together clinical, operational, regulatory and technical aspects of health care delivery, but it is a challenge to which we are committed. OMAP, as the agency responsible for the Medicaid program within the Commonwealth, has a significant role in implementation of this initiative. MA has developed a vision and strategy for moving forward that will allow us to be a leader in using electronic health care information to improve the quality and cost-effectiveness of service delivery for MA consumers.

Implementation of EHRs as well as other HIT projects, such as e-prescribing, reflects the Department's longstanding goal to pursue opportunities to improve services to MA consumers. OMAP, the Commonwealth's single state agency for Medicaid, is charged with the implementation of Medicaid HIT initiatives and has developed the following ARRA HIT vision:

*To improve the quality and coordination of care by connecting providers to patient information at the point of care through the meaningful use of EHRs*

MA will achieve this vision by actively encouraging the adoption of HIT through a variety of means, such as developing and evaluating EQUIPs that promote the meaningful use of EHRs. MA will also educate stakeholders about the role of HIT in improving the quality and coordination of health care services delivered to our consumers.

The MA goals include:

- **Increased Quality** – Better information to support clinical decisions by providers increases quality for consumers while reducing costs
- **Increased Awareness** – Education allows providers and consumers to understand the benefits for adoption of HIT
- **Increased Coordination** – Eliminating duplicative services and administrative inefficiency results in better care coordination for consumers
- **System Redesign** – Evaluation through the use of metrics provides opportunities for MA to enhance and improve current quality initiatives for both providers and consumers

Given the ARRA, MA is developing an approach to HIE and supporting various EMR and EHR efforts. The GOHCR is currently working towards implementing the PHIX, an infrastructure to support access to and the exchange of EHR information between providers. The additional funding from the federal government will provide MA with the opportunity to significantly enhance our efforts.

To achieve our vision, MA must work to directly support the administration of the ARRA requirements and support ongoing efforts to continually recognize opportunities to enhance services to MA consumers, in this instance, through the adoption of quality improvement projects that incorporate EHRs.

MA has identified four stages for implementing our vision:

- Stage 1: Planning and Design Begins (FY 2009)
- Stage 2: Construction Begins (FY 2010)
- Stage 3: Utilization Begins (FY 2011)
- Stage 4: Maintaining Operations (FY 2012 – FY 2015)

The pages that follow outline the basic elements of MA's proposed approach to these four stages. MA's vision is still unfolding in response to stakeholder comments, information about the Commonwealth's existing HIT and the development of EQUIPs.

## **FY 2009: Stage 1 - Planning and Design Begins**

While detailed guidance for the implementation of the HIT-related portions of the ARRA is still being developed at the federal level, MA has designed a preliminary approach for moving forward with our vision and is in the process of gathering information and public comments to aid in this Planning and Design Stage.

### **Health Information Technology Vision**

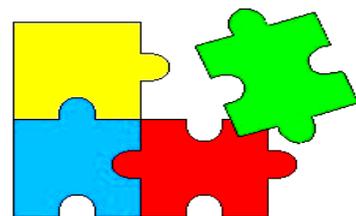
MA is committed to using HIT to improve the quality and effectiveness of care provided to MA consumers. The MA HIT vision is:

*To improve the quality and coordination of care by connecting providers to patient information at the point of care through the meaningful use of EHRs*

MA will achieve this vision by actively encouraging the adoption of HIT through a variety of means, such as developing and evaluating EQUIPs that promote the meaningful use of EHRs. MA will also educate stakeholders about the role of HIT in improving the quality and coordination of health care services delivered to stakeholders.

### **Outreach, Education and Engagement**

The implementation of statewide EHRs and EQUIPs is a complex multi-year undertaking. Effective communication throughout this process will be an important factor in its ultimate success. MA has identified a preliminary communication structure for this outreach that can grow and evolve throughout the implementation stages of a statewide EHRs system. Implementation of this communication structure has already begun.



### **FY 2009: Stage 1 - Planning and Design Begins – Key Milestones**

- Develop MA's HIT vision
- Conduct initial outreach, education and engagement – listening tours
- Conduct an environmental assessment
- Work with stakeholders to identify the components of a certified EHR
- Implement the HIT DESIGN (Develop EQUIPs, Support Initiatives, Get Numbers)
- Collaborate to develop a strategic plan

In July 2009, an HIT stakeholder advisory group was formed within the Medical Assistance Advisory Committee (MAAC). This HIT workgroup includes members of MAAC who represent the ARRA-eligible providers as well as representatives of other key stakeholders that are important to MA for the successful implementation of a comprehensive HIT plan under the ARRA (e.g., consumers, nursing homes and behavioral health providers). The advisory group will be informed about ongoing activities related to the implementation of EHRs and will meet monthly to provide comments to MA. The group's comments will then become part of the information that is incorporated into MA's ongoing planning and design process as well as later implementation stages.

A second component of our communication strategy is the development of a HIT website by OMAP. This website:

- Provides easily accessible information about HIT activities within Pennsylvania
- Provides links to key federal websites
- Serves as a tool for distributing and gathering information, for example, the HIT environmental assessment survey tools discussed below will be made available through the OMAP website

A third component of MA's outreach, education and engagement plan will consist of a listening tour across the Commonwealth during late 2009 and early 2010. This listening tour will allow an open dialogue about MA's HIT vision, including implementation of EHRs and will provide an opportunity to receive additional comments and recommendations regarding HIT-related clinical, operational and technical issues. MA recognizes the potential challenges of implementing EHRs, including security and privacy concerns, lack of standards and implementation guidelines, antiquated regulations, the need for clinical relevance, inadequate training and the effect on business operations and cost. Another recognized challenge is sustaining an EHR system over time, including maintenance activities and enhancements to support the system. The listening tour will allow stakeholders to discuss opportunities, concerns and perceived barriers they see related to increased access to EHRs and to collaborate with MA on approaches to successfully address the opportunities and challenges in order to move forward.

A fourth component of MA's communication and education strategy will be to engage and participate with health care providers in training opportunities to adopt and use HIT. This will be accomplished by working collaboratively with provider associations, MCOs and individual providers. It is anticipated that early education will focus on the goals of EHRs, federal regulations and MA's role in helping to bridge the health information gap. Ongoing education will include information about HIT implementation plans, such as clinical process issues and other operational issues as well as more detailed information about MA's EQUIPs.

### **HIT Environmental Assessment**

A key activity that will be completed during the Planning and Design Stage is a HIT environmental assessment of the health care system in Pennsylvania. The environmental assessment will provide an understanding of where MA is today and what needs to be done to move forward and will involve several activities, including surveys and a listening tour. The purpose of the environmental assessment is to inform the planning and design process and to increase education and buy-in about the benefits of EHRs.

MA is designing survey tools to gather information from various sectors of the health care industry, including physicians, hospitals, federally qualified health centers, labs, pharmacies and MCOs. The tools will collect information about:

- The current electronic capabilities of health care providers
- The number, types and geographic location of providers who are currently using some type of EMR system
- The degree to which electronic health information is currently being shared among providers and/or between providers and patients
- The types of health care data collection and sharing systems currently in use

In addition, MA will use the environmental assessment to obtain information about provider participation and interest in the collection and sharing of electronic health information and barriers that may currently exist. To complete the environmental assessment, MA will post a HIT survey tool for each provider type when they become available at:

<http://www.dpw.state.pa.us/PartnersProviders/MedicalAssistance/MAHITI/>. Providers should periodically visit the website to check for these survey tools.

## **The DESIGN**

The environmental assessment and outreach and education are just some of the supporting pieces necessary for MA to help bridge the current health information gap between and among providers and patients. One of the purposes of MA administrative funding is to encourage the adoption and use of certified EHR technology by states, providers and consumers to improve health care outcomes. This EHR technology is used to electronically capture text and coded health information and to exchange that health information to track key clinical conditions. This exchange is the foundation of meaningful use and is something that MA must track and verify when an incentive payment is made to a provider or hospital.

During the planning and design stage, MA will adopt a use case approach called the HIT DESIGN (Develop EQUIPs, Support Initiatives, Get Numbers) that links EQUIPs to an MA initiative that results in project evaluation using a METRIC (Methods and Evaluation Tools to Reach Improved Care). The purpose of the HIT DESIGN is to assist providers in reaching and demonstrating meaningful use while allowing consumers to learn how EHRs that are linked to MA initiatives can improve their health outcomes. The HIT DESIGN includes the following components:

- **Develop EQUIPs:** The purpose of an EQUIP is to create an operational and clinical approach to the use of HIT while assuring the HIT adoption is not just an end in and of itself. Thus, MA will be developing and implementing EQUIPs which link MA populations and eligible providers to the coded health information within an EHR. Many of the elements in the EQUIPs are congruent with CMS's current guidance on the definition of an EHR and meaningful use. OMAP will work with CMS and providers to prioritize and select a subset of the clinical data elements in the EQUIP in the first year of the incentive program in 2011 and wrap those elements around an MA quality initiative. This incremental approach will allow MA providers to move towards the adoption of full meaningful use without being overwhelmed by too many new requirements. OMAP EQUIPs are focused on the following broad areas:

screening, pediatrics, obstetrical care, chronic care, behavioral health and transition of care.

- **Support Initiatives:** MA has aggressively pursued and implemented numerous quality initiatives over the past several years. Some of these initiatives include a pay for performance program to increase quality, reductions in health care spending for preventable serious adverse events and redesign of methods of delivering care to individuals with chronic conditions. The clinical information collected in an EQUIP and exchanged through an EHR will be linked to many of these initiatives.
- **Get Number(s):** MA is committed to demonstrating a return on the investment we will make in HIT. The easiest way to show a positive return is by tracking the meaningful use of clinical information by providers at the point of care. MA will be developing an approach known as the METRIC to evaluate the clinical information exchanged between providers and the Department and how that information is used by providers to increase the quality and coordination of care provided to MA consumers. The early identification and implementation of METRICs will allow MA to enhance initiatives over time based on outcomes, comments about the initiatives and the continued adoption of HIT by health care providers across the Commonwealth.

MA will provide education and outreach for each of the DESIGN components so that the provider's purchase of EHR technology is not an end in and of itself. Instead, the use of that EHR technology will lead to improved access, care and quality for MA consumers while reducing costs within the health care system. Appendix A, Overview of Preliminary DESIGN Objectives, shows the areas covered by the HIT DESIGN for a number of practice areas relevant to demonstrating meaningful use in the MA Program. Each HIT DESIGN chart shows the EQUIPs that will be used for a practice area and the MA initiatives that will use the clinical data that is exchanged. The EQUIP and initiative are then linked to a METRIC that provides various opportunities to review the clinical data and its impact on the MA initiative and consumers.

MA will post a preliminary, but not definitive, list of EQUIPs on its website at:

<http://www.dpw.state.pa.us/PartnersProviders/MedicalAssistance/MAHITI/>. Providers can post comments about these EQUIPs on this website or may testify during the MA listening tours,

which will be held across the Commonwealth in the coming months. Provider comments should focus on the clinical elements that MA will collect, whether these clinical elements are attainable in the first year of operation for the EHR, and suggestions for other areas that MA should explore to reach a quality outcome for a particular MA population. Appendix A, Overview of Preliminary DESIGN Objectives, indicates the practice areas that the EQUIPs will cover.

### **Preliminary Medical Assistance HIT Strategic Plan**

The activities completed during the Planning and Design Stage will culminate in the development of a preliminary HIT strategic plan that reflects the results of the environmental assessment, insights gathered during outreach and education activities and the preliminary identification of MA EQUIPs. A key element of the preliminary strategic plan will be defining the role of HIEs in the sharing of health care information among health care organizations. MA will collaborate with existing and emerging HIEs to begin to develop comprehensive EHRs and to implement EQUIPs. The environmental assessment and ongoing outreach efforts will identify potential HIEs with which MA can collaborate. (As discussed under Stage 2, MA anticipates that collaborations with HIEs will evolve and expand over time as electronic HIT increases and will eventually evolve into a statewide exchange that utilizes the PHIX, the Commonwealth's statewide HIE network that is currently under development by the Pennsylvania GOHCR.)

### **Benefits – Stage 1**

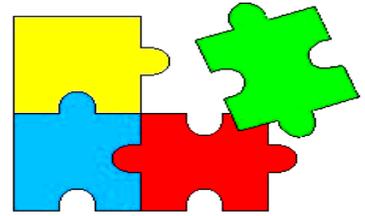
At this stage in the process, stakeholders should become more aware of the benefits of EHRs and gain an understanding of how EHRs can contribute to advancing quality of care. MA will also gain a more comprehensive understanding of the existing environment and potential challenges as we move forward with statewide implementation of EHRs. Based on this information, MA will develop a preliminary strategic plan.

## **FY 2010: Stage 2 - Construction Begins**

During early 2010, the Planning and Design Stage will move into the Construction Stage. This stage will include the development of an updated MA strategic plan, continued identification of existing and emerging HIEs and partnering opportunities and continued development of EQUIPs. During 2010, CMS will provide further federal guidance specifying how meaningful use will be determined and applied to provider incentive payments. MA will, in turn, update the strategic plan, EQUIPs and provider education and outreach plans based on additional meaningful use guidelines.

### **Health Information Exchanges**

In recognition that the statewide implementation of PHIX is a significant undertaking that may occur over multiple years, during this stage MA will also explore opportunities for interfacing with existing HIEs. As discussed earlier, an HIE is created when two or more health care organizations come together and begin to share their EMRs. This sharing of information across organizations begins to form the basis for a comprehensive EHR. MA's role will involve identifying existing and emerging HIEs and opportunities to use these systems. MA will also be collaborating with health care providers to implement EQUIPs. At this time, MA is exploring opportunities to work with HealthChoices MCOs and ACCESS Plus contractor to help launch an exchange of EHRs for MA consumers.



## **FY 2010: Stage 2 - Construction Begins – Key Milestones**

- Identify existing and emerging HIEs and partnering opportunities
- Continue to develop EQUIPs
- Develop METRICs (Methods and Evaluation Tools to Reach Improved Care) to measure providers' meaningful use of EHRs
- Update the MA strategic plan based on additional provider outreach and the definition of meaningful use under federal guidelines
- Conduct continued outreach, education and engagement

## **Pennsylvania Health Information Exchange**

The GOHCR is developing a statewide HIE that will support the sharing of health care information across authorized users in an accessible and secure manner and will improve the authorized access to electronic health information for all of Pennsylvania's health care providers, payers and patients. MA's HIT vision recognizes the PHIX as the initiative that will eventually allow statewide implementation of MA's DESIGN. Any information networks that MA chooses to develop for the exchange of EHRs during this stage can ultimately link to PHIX, becoming part of the Commonwealth-wide repository and communication system for the exchange of EHRs.

## **Electronic Quality Improvement Projects**

During the Construction Stage, MA will continue to develop the HIT DESIGN and expand the list of EQUIPs which link MA populations and eligible providers to the meaningful use of a quality outcome. MA will encourage providers to review and choose an EQUIP relevant to their area of practice and will monitor their exchange of clinical data. During Stage 2, MA will post this new set of EQUIPs on its website at:

<http://www.dpw.state.pa.us/PartnersProviders/MedicalAssistance/MAHITI/>.

## **Methods and Evaluation Tools to Reach Improved Care**

As MA begins to receive provider comments about EQUIPs and determine those clinical data that will be collected and exchanged between providers and the Commonwealth, we will begin to develop the METRICs that will be tied to adoption of certified EHRs and to the implementation of EQUIPs. As EHR data requirements become final at the federal level for specific provider groups, MA will incorporate these requirements into detailed METRICs. The early identification and implementation of METRICs will allow MA to enhance quality improvement projects over time based on outcomes, comments about the METRICs and the continued spread of HIT by health care providers across the Commonwealth.

## **Continued Outreach and Education**

MA will coordinate with provider associations, health care systems and MCOs to provide training to providers. Education and outreach activities will, for example, provide background

about federal programs and their impact on Commonwealth providers as well as information about MA's vision for facilitating the adoption of HIT and related EQUIPs.

### **Strategic Plan**

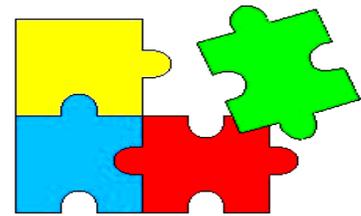
In 2010, MA will be developing a detailed strategic plan for the implementation of our HIT vision. MA's strategic plan will incorporate information gathered during the planning and design stage and will provide a detailed strategy and workplan for moving toward our vision by 2015. MA's strategic plan will also be incorporated into the broader Pennsylvania strategic plan for implementation of HIT.

### **Benefits – Stage 2**

At this stage, more of the details of the plan will be available, giving providers an opportunity to further develop their own capabilities. As the definition of meaningful use and the EQUIPs are finalized, providers will have the specifics that they need to determine how and when they can qualify for the incentive payments.

### **FY 2011: Stage 3 - Utilization Begins**

The Construction Stage transitions into the Utilization Stage during 2011. At this time, MA is expected to begin to issue and monitor incentive payments to eligible providers. In addition, as a purchaser of services, MA will become an active player in the use of EHRs to support quality and cost savings initiatives. MA will collaborate with health care organizations to share electronic health care information in support of quality improvement projects.

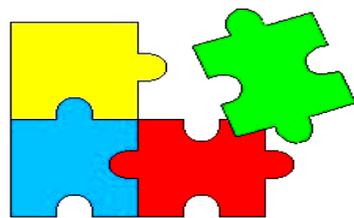


#### **FY 2011: Stage 3 - Utilization Begins – Key Milestones**

- Issue and monitor incentive payments to MA providers
- Begin to implement EQUIPs that incorporate 2013 objectives for meaningful use
- Begin to measure results of the EQUIPs and develop proposed changes in clinical care
- Begin auditing processes for provider use of incentive payments

## **FY 2012 – FY 2015: Stage 4 - Maintaining Operations**

During Stage 4, Maintaining Operations, MA will begin to move into the maintenance and operations activities necessary to support our HIT vision. MA will continue to leverage federal HIT funding initiatives and incentive payments to expand HIE opportunities and to expand and enhance EQUIPs. Electronic information sufficient to evaluate clinical decision making metrics and build upon enhanced quality reporting will now be available as a result of the work performed in the previous stages. A key milestone during this time is MA's development of an approach to provide personal health information to MA consumers to enhance quality of care.



### **FY 2012 – FY 2015: Stage 4 – Maintaining the Operations – Key Milestones**

- Use METRICs to leverage federal HIT funding for incentive payments and initiatives
- Expand HIE opportunities
- Evaluate, expand and enhance electronic quality improvement programs and clinical decision making metrics and quality reporting
- Explore ways to provide personal health information to Medical Assistance consumers to enhance quality of care

## Summary

The use of HIT to transform the delivery of health care services to Pennsylvania's MA consumers is still unfolding, and we are looking for the insight of stakeholders and other interested parties.

We anticipate several key challenges during this process, and MA values stakeholder comments on these and other challenges that stakeholders may foresee, as well as proposed solutions to address these challenges. Many of the challenges may be very specific to one step in the overall transformation while others may be overarching.

We recognize that the timeframe identified through the ARRA requires a significant number of broad-based changes to the health care system in the next five to six years and that the timelines and scope of this transformation will present a key challenge.

Another challenge that must be addressed is the inconsistency in the availability of and experience with HIT in general and specifically with EHRs. For example, some providers practice in areas with limited or no access to the internet while other providers may already have existing EMR systems or may be participating in regional HIEs.

MA is considering how best to recognize and leverage existing HIT and quality initiatives within the HealthChoices and ACCESS Plus programs to assure that Pennsylvania can implement a seamless HIT strategy that continues and expands the successes that have already been recognized in the MA Program and across the Commonwealth.

MA has identified a preliminary list of EQUIPs that will promote the meaningful use of EHRs to improve the quality of services provided to MA consumers. The design of these EQUIPs, the process by which they will be implemented and the priority with which they will be phased in are all under active discussion, and stakeholder comments are key to meaningful EQUIPs for MA consumers within the health care system.

In addition to these broad strategic considerations, MA must also be flexible to respond to the changing federal and state landscape as we move forward. Many of the final federal regulations are pending, and the specific details and processes that must be defined and implemented are still taking shape. For example, one challenge currently being worked through at both the federal

level and within the Commonwealth is how to measure the Medicaid utilization rate that will define eligible non-hospital providers.

MA appreciates comments stakeholders will have to offer about any components of our proposed approach. We look forward to a collaborative process in finalizing an approach for implementing our HIT vision by 2015, and we welcome new and continuous comments and recommendations from stakeholders now and continuously as we work to further identify and define our proposed approach.

For more information, including detail about the ARRA and its impact on stakeholder groups, visit the below websites:

- Medical Assistance Health IT: <http://www.dpw.state.pa.us/PartnersProviders/MedicalAssistance/MAHITI/>
- Certification Commission for Health Information Technology (CCHIT): <http://www.cchit.org/>
- Center for Medicaid and State Operations (CMSO): [http://www.cms.hhs.gov/cmsleadership/07\\_office\\_cmso.asp](http://www.cms.hhs.gov/cmsleadership/07_office_cmso.asp)
- Office of the National Coordinator for Health Information Technology (ONC): <http://healthit.hhs.gov>

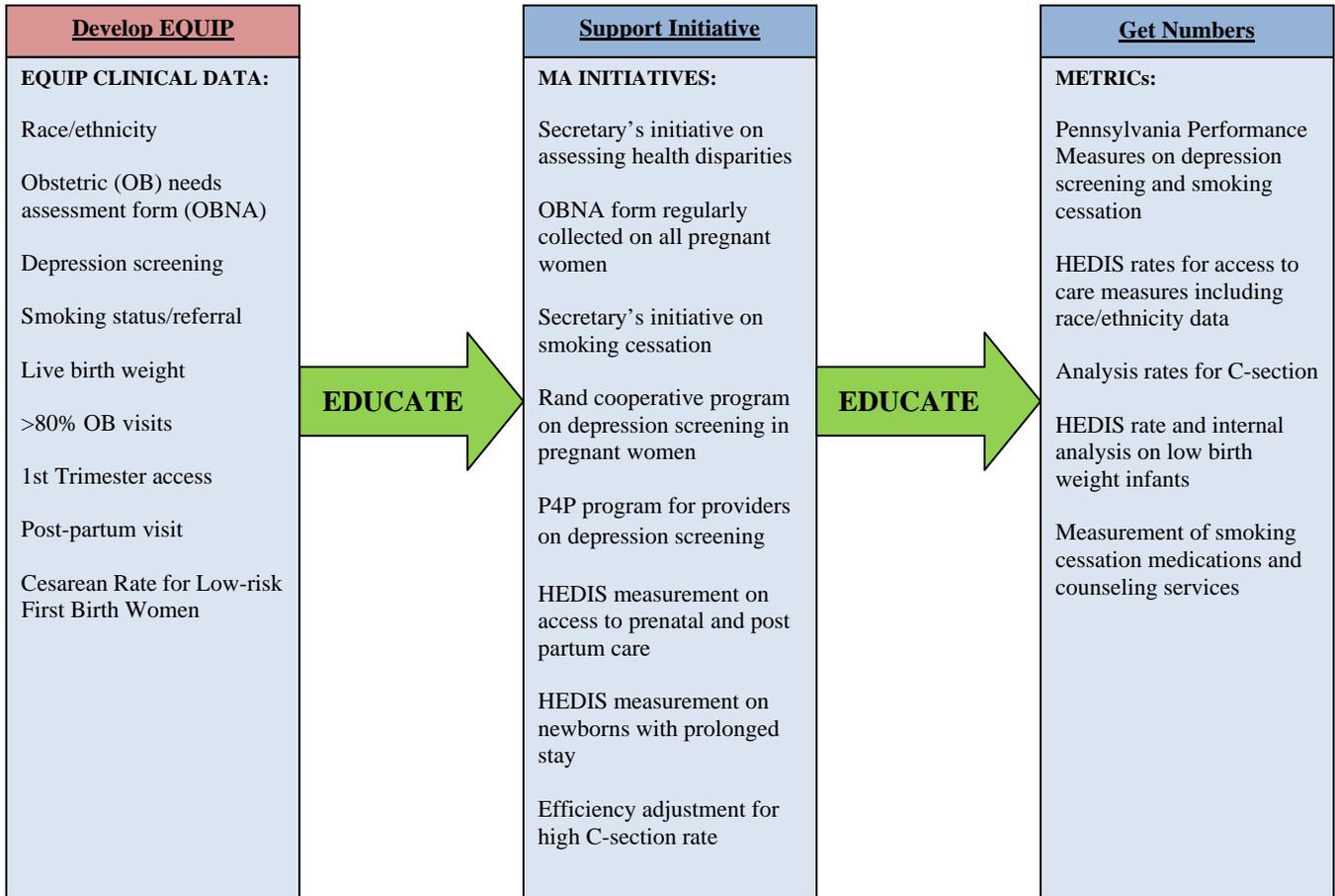
*Please email any questions or comments about our proposed approach or the ARRA to:*

[ra-mahealthit@state.pa.us](mailto:ra-mahealthit@state.pa.us).

**Information about the 2009 and 2010 listening tour will be forthcoming.**

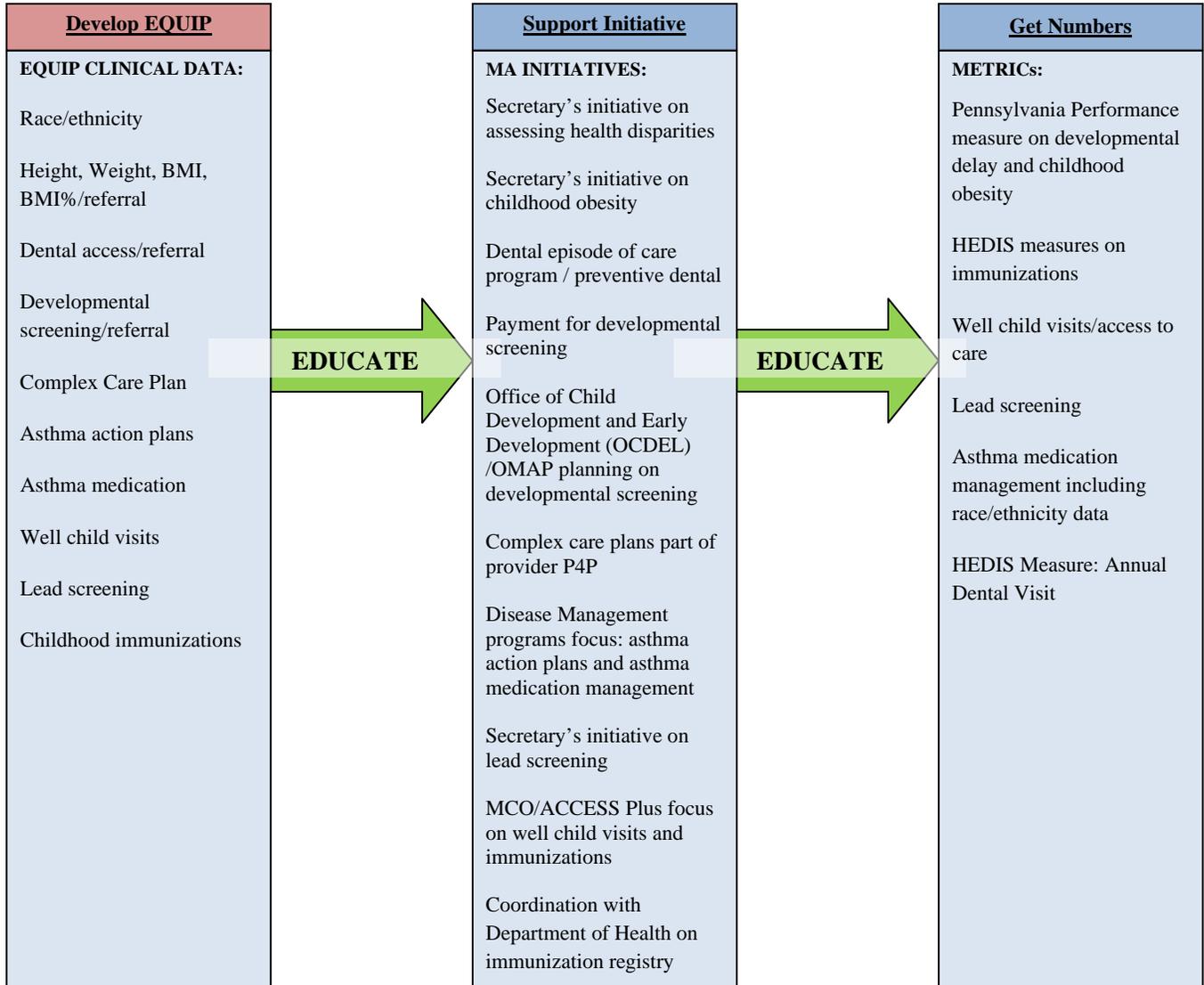
**Appendix A: Overview of Preliminary DESIGN Objectives**

**DESIGN – Obstetrics**



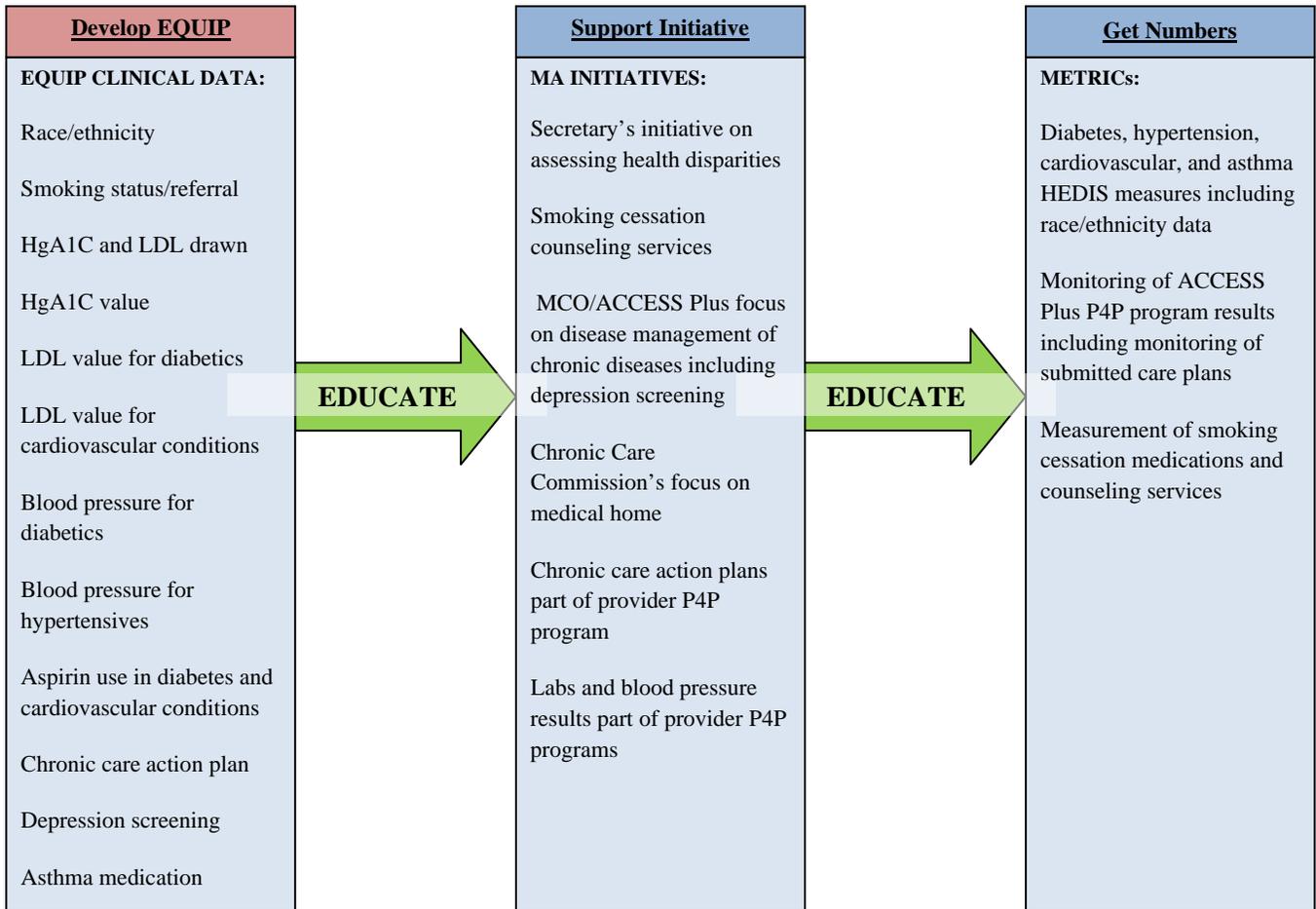
**Appendix A: Overview of Preliminary DESIGN Objectives**

**DESIGN – Pediatrics**



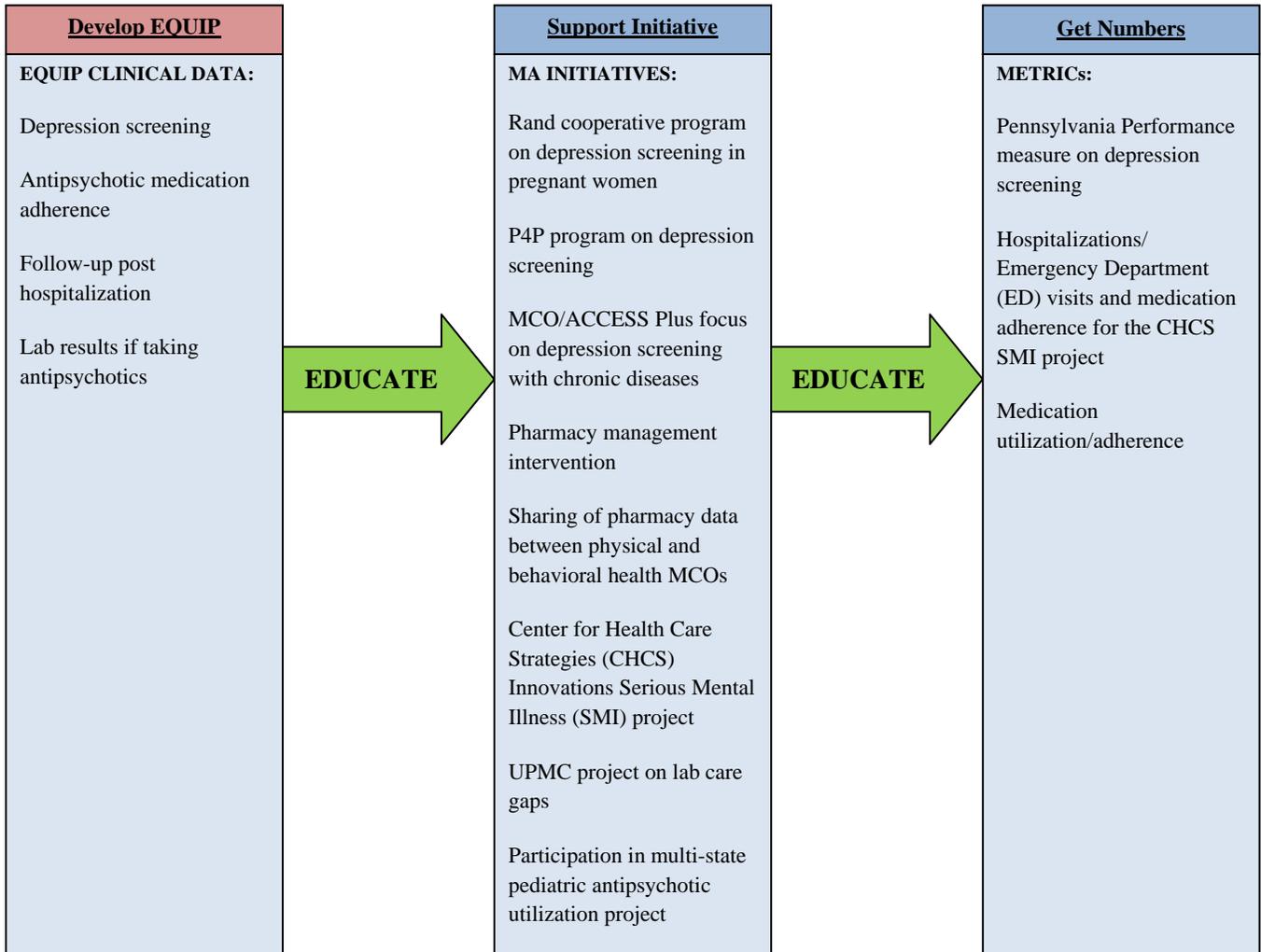
**Appendix A: Overview of Preliminary DESIGN Objectives**

**DESIGN – Chronic Disease**



**Appendix A: Overview of Preliminary DESIGN Objectives**

**DESIGN – Behavioral Health**



**Appendix A: Overview of Preliminary DESIGN Objectives**

**DESIGN – Transition of Care from Hospital or Emergency Department**

