1: Organization and Administration

Under this funding opportunity, MassHealth proposes to accomplish the following aims:

Aim One: Implement measures from the Adult Initial Core Set Measures (Core Set) in both years of the grant;

Aim Two: Prepare and implement a strategy for enhancing MassHealth's capacity to prepare, interpret, report and use quality measure information; and

Aim Three: Use data to drive decision-making and quality improvement.

These aims will be implemented through a partnership of MassHealth, University of Massachusetts Medical School, the Department of Public Health and the Division of Healthcare Finance and Policy (soon to be named the Center for Health Information and Analysis) as described below.

1.1 Grant partners

Executive Office of Health and Human ServicesMassHealth – Office of Analytics (MOA): The Executive Office of Health and Human Services is applying for this grant. MassHealth will be the lead agency within the Secretariat that is responsible for overall design integrity and project execution (all Aims). MassHealth will manage all communication with CMS and stakeholders. Within MassHealth, the Office of Analytics will be the unit responsible for the grant activities. The mission of the Analytics unit is "to design and deliver relevant, high quality data, analysis, and analytic expertise to support MassHealth's strategic priorities and to meet our external obligations." Analytics staff work with program and policy staff to identify opportunities for data and analytics to support the strategic priorities of MassHealth. The Project Manager and the Data Analyst will be a member of the Office of Analytics.

University of Massachusetts Medical School (UMMS) – MassHealth Quality Office: The UMMS MassHealth Quality Office (MQO), located in the Office of Clinical Affairs, will play the major supporting role to MassHealth for this grant. The MQO coordinates and leads quality planning, measurement, improvement and evaluation functions across the agency. The MQO runs the MassHealth Measurement Team, a workgroup that oversees quality measurement activities. The MQO will procure a vendor to implement the HEDIS® measures in the Core Set and coordinate with other MassHealth and EOHHS programs to secure the data necessary to calculate the measures. Furthermore, the MQO will convene and run workgroups necessary to design and implement the quality improvement projects QIPs described below in Section 3.2.3.

Massachusetts Department of Public Health (MDPH): The Massachusetts Department of Public Health has several Divisions and Bureaus that will be involved in the execution of this grant. The Commissioner of MDPH co-leads the Statewide Quality Advisory Committee (SQAC) described below in Section 3.1.2 Measurement in the EOHHS Secretariat, which is at the forefront of statewide activities to coordinate quality measurement to reduce the burden on providers and to maximize the usefulness of information to users. We will work closely with MDPH to acquire the data necessary to calculate measures (Aim One) and with the Bureau of Substance Abuse in particular (Aim Three) to design and implement a quality improvement project around the Initiation and Engagement in Alcohol and Other Drug Dependence Treatment (IET) QIP. A letter of support from MDPH Commissioner Auerbach is shown in Attachment 1.

Division of Health Care Finance and Policy (DHCFP): The Division of Health Care Finance and Policy (DHCFP) will participate in this grant in several ways. First, with DPH, DHCFP co-leads the Statewide Quality Advisory Committee. Secondly, DHCFP manages the state's all-payer claims database which is just beginning to accept requests for data. DHCFP will

partner on this grant principally on Aim One, but also as a partner on the QIPs (Aim Three). A

letter of support from DHCFP Commissioner Boros is shown in Attachment 2.

1.2 Other Relevant MassHealth grants

CHIPRA Demonstration Grant: In February 2010, Massachusetts was awarded a five

year CMS CHIPRA Quality Demonstration grant. The Massachusetts CHIPRA Project is led by

MassHealth in partnership with Children's Hospital Boston, the Massachusetts Health Quality

Partners, the National Initiative for Children's Healthcare Quality and UMMS. The Project

Director for the CHIPRA grant is a member of the MQO. The Massachusetts' CHIPRA Project

includes three components: (1) implementing the Core Set of Child Health measures; (2)

developing and implementing a pediatric medical home model; and (3) establishing a Child

Health Quality Coalition, a statewide public-private partnership engaging over 60 leaders and

representing multiple stakeholders. The CHIPRA grant activities support the development and

maintenance of an integrated approach to measurement and improvement across all settings of

children's health care delivery and is expected to lead to transformation gains in children's health

and outcomes.

Massachusetts Medicaid EHR Incentive Payment Program: MassHealth launched its

Medicaid Electronic Health Record (EHR) Incentive Payment Program on October 3, 2011.

Through June 2012, the Massachusetts Medicaid EHR Incentive Program disbursed over $44.7

million to 2,138 eligible professionals (EP) - about 28% of MassHealth eligible professionals -

and $41 million to 42 eligible hospitals (65% of 65 hospitals). The incentive program is one facet

of a broader Massachusetts strategy to build a health information exchange (HIE). The HIE plan

includes a multi-state data portal called the Medical Assistance Provider Incentive Repository

(MAPIR). Although the MAPIR portal will accept meaningful use clinical data from EPs, the

functionality will not be fully developed for this grant cycle. Coupled with an expected

penetration rate of 82% among MassHealth EP's by 2014, the grant team is not relying on

MAPIR as a data source. Depending on development progress, the team may conduct small tests

using MAPIR as a source of data for the Adult Core Measure Set.

1.3 Administrative organization

As described above under Section 1.1, this proposal includes three partners in addition to

MassHealth. Two of the partners, MDPH and DHCFP, are within the same Secretariat as

MassHealth. The third partner, UMMS, has a longstanding relationship, fifteen years, with

MassHealth through an annually renewed Interagency Service Agreements (ISA).Attachment 3

shows the organizational structure of MassHealth with the Office of Analytics and the

MassHealth Quality Office highlighted. A dotted line, such as the one for the Office of Clinical

Affairs and MassHealth represents an ISA that joins the units. Attachment 4 displays the

Massachusetts Secretariat of Health and Human Services and highlights the partners for this

grant. The specifics of the data collection strategy will be described below under Section 4.1

Collecting data for the core measure set – Aim One.

2: Narrative Staffing Plan

Co-investigators: The work of this grant will be under the direction of co-investigators

Dr. Marian Wrobel, Director of the MassHealth Office of Analytics (MOA), 5% and Dr. Ann

Lawthers, Director of the MassHealth Quality Office (MQO), 5%, in-kind. The investigators will

design and oversee data analyses as well as the quality improvement projects to be implemented

under this grant. Both co-investigators have extensive research backgrounds and will take lead

roles in designing the training envisioned as part of Aim Two.

Project Manager: The MOA will hire a full-time (100%) project manager. The ideal candidate for this position would have project management, data analytic and translational skills. By translational skills, we mean an individual who understands data, programming, and statistics, but who can also speak the language of the policy environment. In addition to managing the grant, the project manager will be responsible for developing and implementing the training programs described below under Aim Two. The job description for this position is shown as Attachment 5.

Data Analyst (MOA): A full-time (100%) data analyst, to be hired, will perform multiple functions such as assisting the project manager to conduct drill-down data analyses (Aim Two) and supporting the calculation of measures.

Nurse Quality Manager (PCC Plan): Susan Maguire, a nurse quality manager from the PCC Plan will devote 25% of her time to working with PCC Plan providers to ensure they submit the data required to construct the measures. In addition, Ms. Maguire will work with MQO staff on the QIPs (Aims One and Three).

Director of Measurement (MQO): David Tringali will devote 10% of his time, in kind, in each of two years to managing and overseeing the activities of MQO staff, working with the project manager to develop measurement trainings, and overseeing the implementation of the QIPs.

Other Staff (MQO): Two Project Directors, Jillian Richard-Daniels and Rossana Valencia will spend 20% of their time over the next two years working with grant partners to carry out the QIPs (Aim Three). A Project Associate, Terri Costanzo, will devote 10% of her time to manage the existing PCC Plan HEDIS vendor and to managing a new vendor to be procured as part of this grant. Two Senior Research Analysts, Paul Kirby and Josh Twomey, will

spend 10% of their time on data analyses related to the QIPs, as well as preparing narrative

reports of findings. Paul Kirby also runs the MassHealth Measurement Team, the workgroup that

will be responsible for overseeing the implementation of the Adult Core Measure set.

3 Operational Plan

3.1 Quality measurement in MassHealth and other Massachusetts agencies

3.1.1 MassHealth measurement

HEDIS: MassHealth has conducted HEDIS measurement since 1997 and since 2001, has

collaborated with the UMMS to accomplish the annual assessment of the performance of

MassHealth managed care plans based on selected HEDIS measures. The slate of HEDIS

measures rotates biennially and typically includes nine to twelve measures. The UMMS MQO

receives data from each of the MassHealth managed care plans and produces a summary report

with benchmarks that is posted on the MassHealth website

(http://www.mass.gov/eohhs/researcher/insurance/masshealth-annual-reports.html). This grant

opportunity will permit the expansion of the HEDIS measures collected and reported to

MassHealth.

Patient Experience Survey: In partnership with the Massachusetts Health Quality

Partners, MassHealth conducts a patient experience survey approximately every two years. The

last two surveys were at the practice-level with the most recent survey in 2012 using the

CAHPS-CG® questionnaire and the medical home supplemental questions.

Clinical Topic Reviews (CTR): Since 1999, MassHealth has periodically asked UMMS

to conduct focused studies on specific clinical topics, usually doing a "look-behind" at HEDIS

results. CTR topics have included pre-natal care, childhood immunization, depression in the

community and childhood behavioral health screening.

Hospital Pay-for-Performance (P4P) Program: The MassHealth Hospital P4P Program was established in 2006 as part of the landmark Massachusetts health reform legislation. The P4P Program seeks to reward hospitals for achieving quality and performance standards, including reducing racial and ethnic health disparities. Each year, the Acute Hospital Request for Applications (RFA) outlines the terms and conditions for earning P4P payments. The set of P4P measures is reviewed annually for continued relevance and usefulness.

Nursing Facility Pay-for-Performance (P4P) Program: The Nursing Facility (NF) P4P program rewards nursing facilities for improving the quality of care delivered to residents. In FY12, the program encouraged nursing facilities to focus quality improvement efforts on a consistent staff assignment model of care. Planning is underway for the FY13 program which has funding of $2.8 million.

MassHealth Data Warehouse and Cognos Interface: MassHealth maintains a robust Data Warehouse with vast enrollment, eligibility, claims, encounter, payment, member demographics, patient characteristics, patient discharge, and other data that support the MassHealth service delivery and payment systems. The MassHealth Data Warehouse staff are actively involved in the design and implementation of the Medicaid HIE structure described earlier. EOHHS acquired the Cognos software to interface between MassHealth MMIS data and the end user – MassHealth staff and make aggregate claims and eligibility data more readily available to staff. The MassHealth data warehouse team regularly creates new cubes for users to address special business needs, such as prior authorization monitoring or tracking behavioral health screening for children.

3.1.2 Measurement in the EOHHS Secretariat

The three items described below offer a sampling of the many measurement and quality activities across the Secretariat.

Statewide Quality Advisory Committee (SQAC): Section 54 of Chapter 288 of the Acts of 2010 mandated the SQAC. The legislation required MDPH to form an advisory committee and establish a standard set of quality measures for use in regulatory processes. As a starting point, the SQAC was required to consider HEDIS, the HCAHPS®, some of the CMS Hospital measures and the Ambulatory Care Experiences Survey (the CAHPS-CG predecessor). Many of the Adult Core Measure Set metrics were adopted into the standard set as of August 2012.

MDPH Bureau of Health Care Safety & Quality: The MDPH Bureau of Health Care Safety & Quality oversees facility licensure and inspection including hospitals, long term care facilities, clinics, hospice programs, emergency medical services, health professionals, and out of hospital dialysis units. It also collects data on serious reportable events and metrics related to the facilities it licenses, such as hospitals. The Bureau leads quality improvement and measurement programs across the continuum of care, and engages in activities supporting a diverse array of sister agencies, including MassHealth.

MDPH Massachusetts Community Health Information Profiles (MassCHIP): MassCHIP is a web-enabled health data query system developed by the Massachusetts Department of Public Health, and distributed publicly as a free good since 1997. MassCHIP contains 39 major data sets, including vital statistics (births, deaths, infant deaths, linked birth-infant death), cancer registry, hospitalizations, emergency department visits, outpatient observation stays, admissions to MDPH-funded substance abuse treatment facilities, the BRFSS,

WIC beneficiaries, and TANF beneficiaries, which users may query one data set at a time. The system offers users counts of events and associated statistics, such as percentages and rates (age-specific, age-adjusted, and crude rates) along with 95% confidence intervals to allow users to identify statistically significant differences.

3.2 Implementation plan

This section presents the implementation plan for the grant with the goals and strategies associated with each of the major aims.

3.2.1 Aim One –implementing the core measures

Under Aim One, we have identified two goals: select and implement Adult Core Measures in each year of the grant and secondly, develop a plan for sustaining the implementation of quality measurement post grant.

The strategies to achieve the goals include: (1) leveraging an existing MassHealth workgroup, the MassHealth Measurement Team, to guide and oversee the implementation of all measurement activities; (2) procuring NCQA HEDIS certified software to function on top of the MassHealth data warehouse to facilitate data analysis; (3) using existing structures to collect the HEDIS-type measures for managed care members, both PCC Plan and MCO Program members; and (4) collecting data and information throughout the grant to evaluate the feasibility of continuing the preceding three strategies for MassHealth.

Strategy 1 - MassHealth Measurement Team: The existing MassHealth Measurement Team (see Section 3.1.1 MassHealth measurement) will be charged with making decisions about which MassHealth populations to incorporate, which measures to include, and the strategy for data collection and oversight. The Measurement Team will be responsible for creating and implementing a dissemination strategy for measurement results.

The MassHealth Measurement Team has already identified the measurement focus for this grant to be adult managed care members ages 18 and older. The following chart shows that two thirds of MassHealth members are in managed care. The remaining members, FFS, are either dually eligible for Medicare and Medicaid, or have other third party liability and thus are not eligible for the MassHealth managed care programs. The rationale for focusing on managed care was data completeness. MassHealth has neither person-level Medicare data for the dually eligible nor data from other insurers for those with third party liability. The Measurement Team determined that the two-year grant period was insufficient to warrant pursuing the Medicare data.

Table 1: MassHealth Enrollment as of August 2012, By Age and Managed Care Status

	Ages 0-20 (% all ages)	Ages 21-64 (% all ages)	Ages 65+ (% all ages)	All Ages	% of total enrollment
Managed Care	463,988 (52%)	402,671 (45%)	25,745 (3%)	892,404	66%
FFS	112,119 (24%)	219,533 (47%)	131,665 (28%)	463,317	34%
Total	576,107	622,204	157,410	1,355,721	100%

The Measurement Team selected a preliminary group of measures for implementation based on criteria of relevance and feasibility. Relevance was defined as alignment with existing and new MassHealth policy initiatives such as the Multi-Payer Patient-Centered Medical Home Demonstration (PCMHI), the Dual-eligibles Demonstration, Primary Care Payment Reform (PCPR), and the Hospital Pay-for-Performance Program. Feasibility hinged on whether the measure required MassHealth to implement new data collection processes, processes that in some cases might require regulatory changes (e.g. requiring the use of CPT II codes for some procedures before a claim can be paid). Table 2 displays the preliminary list of measures for implementation during the two years of the grant. Measures that require new data collection infrastructure have been slated for implementation in calendar year 2014. Measures that are new for the managed care plans have an "*".

Table 2: Adult Core Measures to be implemented under this grant

	Implementation Year (Calendar)	
Measure	2013	2014
1. Adult BMI Assessment*	✓	✓
2. Breast Cancer Screening	✓	✓
3. Cervical Cancer Screening	✓	✓
4. Depression Screening/Follow-Up*		✓
5. Plan All-Cause Readmission*	✓	✓
6. Adult Asthma Admissions (PQI – 15)*		✓
7. Chlamydia Screening (Women 21-24)	✓	✓
8. Follow-Up After Hosp for Mental Illness	✓	✓
9. Elective Delivery* +		✓
10. Controlling High Blood Pressure	✓	✓
11. Diabetes Care: A1c Testing	✓	✓
12. Antidepressant Med Mgmt	✓	✓
13. Care Transition Record Transmittal*		✓
14. Initiation/Engagement Drug Alcohol Treatment	✓	✓
15. Postpartum Care Rate	✓	✓

* New Measures for MassHealth Managed Care
+ Currently collected for PCC Plan

This slate of measures was identified by the Team to represent a mix of old and new measures. There are several "stretch" measures included such as Depression Screening and Care Transition Record Transmittal which the group has identified as essential to quality care, yet MassHealth currently does not have processes in place to collect the data for the measures across managed care. This grant will stimulate the development of those processes.

In addition to the fifteen measures in Table 2, the Measurement Team will consider other measures for the CY 2014 measurement cycle if the measures are HEDIS or are calculated from administrative claims data. These measures include: plan all-cause readmission (HEDIS), Annual Monitoring for Patients on Persistent Medication (HEDIS), PQI 01 – Diabetes short-term complications admission rate, PQI 05 – COPD admission rate, and PQI 08 – CHF admission rate. The final decision depends on the acquisition of NCQA Certified HEDIS Software, a purchase that greatly expands the number of measures that can be collected.

Strategy Two - NCQA Certified HEDIS Software: The second strategy for implementing the Core Measures involves procuring NCQA-certified HEDIS software. This strategy significantly increases the number of measures that can be collected and analyzed by MassHealth. As noted above in Section 3.1.1, MassHealth's current HEDIS reporting strategy focuses on rotating a small set of measures. MassHealth originally adopted this strategy to minimize the data collection burden both within the organization and among contracted providers. Now that MassHealth's capitated managed care plans collect a full HEDIS slate each year as part of NCQA accreditation, only the state-run Primary Care Clinician (PCC) Plan limits the number of HEDIS measures collected due principally to financial and staffing constraints. With NCQA-certified software, the PCC Plan will be able to calculate and report on an expanded range of HEDIS metrics.

HEDIS software also offers MassHealth the flexibility to analyze existing data at multiple levels (provider versus plan) and for multiple population groups (e.g. members with chronic conditions or by age group). Programming HEDIS measures has proven time-consuming and staff resource intensive due to competing demands for programmer time. Having the software do the calculations presents new opportunities for focusing on the measurement results rather than the process of programming.

HEDIS software represents value-added in other ways. As described earlier, the HIE for Massachusetts is not expected to have information about quality (details of which remain to be specified) available until the end of 2014. Assuming that the HIE will have data that can be leveraged by MassHealth for its federal reporting requirements, the timing appears to be too late for this grant. However, if MassHealth staff have gained experience using HEDIS data at multiple levels of reporting, MassHealth will be well prepared for using data from the HIE.

Strategy Three - Leverage Existing Data Collection Processes. Our third strategy will leverage existing data collection processes (see below, Section 4.1). Briefly, the measurement strategy will use existing structures (e.g. existing HEDIS data collection process for both the MCO program and the PCC Plan) to facilitate the measure data collection and calculation. For those measures that require data sharing between state agencies, e.g. between MassHealth, the Massachusetts Department of Public Health, and the Division of Health Care Finance and Quality, we will use the first year of the grant to secure the necessary data sharing permissions. Should some data become available through the Massachusetts HIE and MAPIR (see above Section 1.2), we will conduct a small pilot test of using that data as well.

Strategy Four - Evaluation and Sustainability. This grant opportunity allows MassHealth to test several strategies for improving the Agency's capacity to do and act upon quality measurement. The key will be to sustain these activities. The sustainability plan will be based on data collected as part of the implementation evaluation (see below Section 4.4, Evaluation). The evaluation will collect information on level of effort required to implement the measures (time, personnel and cost) as well as perceived usefulness of HEDIS software to stakeholders. The development of the sustainability plan will center on linkages and partnerships between existing activities across the EOHHS Secretariat.

Workplan for Aim One

Responsible: MassHealth Office of Analytics (MOA) and MassHealth Quality Office (MQO)

Time Frame: October 31, 2012 – End Date: October 30, 2014

Milestones for Aim One	Start	Finish	Responsible
Select measures for reporting and quality improvement projects	August 2012	October 2012	Measurement Team
Procure HEDIS software vendor	November 2012	January 2013	MQO
Engage 2013 HEDIS stakeholders around slate realignment	November 2012	December 2012	MQO

Milestones for Aim One	Start	Finish	Responsible
Implement 2013 HEDIS measures	January 2013	June 2013	MQO
Implement 2014 HEDIS measures	January 2014	June 2014	MQO
Develop process for collecting non-HEDIS measures, negotiate data-share agreements	January 2013	December 2013	MOA
Implement additional measures	January 2014	December 2014	MOA + MQO
Report to CMS – Phase One	December 2013	January 2014	MOA
Report to CMS - Phase Two	December 2014	January 2015	MOA
Sustainability Plan	June 2014	October 2014	MOA

3.2.2 Aim Two – building MassHealth capacity for measurement and analysis

For Aim Two, the principal goals consist of: (1) increasing the number of staff at MassHealth dedicated to measurement analytics; and (2) developing the capacity of MassHealth to interpret and use measurement data for quality improvement;

We propose three strategies to achieve these goals: (1) hiring additional staff, (2) developing staff skills through focused training in measurement techniques, applying software tools, and using data for decision-making; and (3) building a data cube for the MassHealth Cognos interface to give MassHealth staff wider access to HEDIS results.

Strategy One - Hiring: For strategy one, we intend to use this grant to hire a Project Manager with multiple skills and a Data Analyst as described above in Section 2, Staffing Plan.

Strategy Two – Training: The second strategy involves training. The training content will cover four areas: basic measurement concepts, use of the HEDIS software, conducting drill-downs, and basic research skills. The basic measurement training will include sessions on understanding the components of a denominator (e.g. case finding period, index events, negative event periods, inclusion criteria, sampling), the numerator (e.g. time window for the numerator event, exceptions), and on other topics. The HEDIS software training will distinguish between running the software (i.e. programming) and using the results of the software (interpreting the results).

Conducting drill-downs will focus on the analysis process and how to "peel the onion." For example, one source of the "Elective Delivery" measure is data from the MassHealth Hospital P4P Program. This is based on chart review of a random sample of births at each hospital. Participants in the training would learn to identify possible sources of bias in the results and to consider additional data that might help understand and interpret findings. The final topic, basic research will give participants practice in formulating good questions, developing sound collecting data procedures, using basic statistics, and reporting results.

The trainings will adhere to sound adult education principles. Each session will have specific learner objectives. The techniques to deliver the training will include a mix of didactic presentation, interactive discussion and exercises to practice newly learned concepts. Teaching examples will be drawn from the Adult Core Measure Set to maximize relevance. MOA and MQO will collaborate to develop and deliver the training.

Strategy Three - Data Cube: The third strategy is contingent on the procurement of a certified HEDIS software package to increase MassHealth's ability to analyze the data in multiple ways. We anticipate using the HEDIS software to create static data snapshots that slice and view the data in novel ways. The snapshots would be used to create a Cognos data cube. This makes HEDIS measures widely accessible to any MassHealth staff member who has access to the Cognos data cubes and will expand the use and understanding of quality measurement at MassHealth simply by its availability through existing data portals. Combined with training, quality measurement and tracking can become a powerful management and evaluation tools for MassHealth programs.

<u>Workplan for Aim Two</u>

Responsible: MassHealth Office of Analytics and MassHealth Quality Office

Time Frame: October 31, 2012 – End Date: October 30, 2014

Milestones for Aim Two	Start	Finish	Responsible
Post and hire MassHealth Project Manager and Data Analyst	November 2012	December 2012	MOA
Design training	March 2013	October 2013	MOA
Implement training	November 2013	October 2014	MOA
Build data cube (s)	July 2013	July 2014	MOA

3.2.3 Aim Three – using data to drive quality improvement

This aim has three goals: (1) producing data reports that managers and leadership find useful and help them run their programs; (2) designing and conducting two QI projects that are relevant to MassHealth stakeholders, feasible to implement and have potential for improving the health of MassHealth members; and (3) establishing on-going infrastructure to regularly review measurement results, identify opportunities for improvement and design related QI projects.

Achieving these goals requires the following strategies. First, as required by the grant solicitation, measurement results will be examined for disparities and the findings will be discussed with managers and leadership. Second, MassHealth will use evidence-based processes for designing and implementing quality improvement projects (QIPs) to improve the quality of care for members. Finally, by leveraging existing administrative structures, MassHealth will transform project specific workgroups into long-term committees to oversee the ongoing monitoring and use of quality data in MassHealth.

Strategy One - Analyzing data for disparities. A key test of the enhanced capacity for using data will be the production of reports that analyze measure results for disparities. MassHealth staff will apply the skills learned through the training described as part of Aim Two. The grant solicitation (page 10) specifically requires states to stratify three of the four specified measures by at least two of the following member characteristics - race/ethnicity, gender, language, urban/rural, and disability status. The measures to be stratified include Hemoglobin

A1c Testing, Postpartum Visit Rate, Cervical Cancer Screening, and Controlling High Blood

Pressure. The Measurement Team will stratify three measures, probably the first three from this

list. These analyses serve two important purposes. First, they help MassHealth identify issues

with the data (e.g. race and ethnicity data are known to be incomplete) and second, they assist

managers to understand where their programs should be focusing efforts. As part of this grant,

the Measurement Team will explore a quality improvement project to improve the collection of

race and ethnicity data, an initiative that will involve multiple units within the agency.

Strategy Two - Quality Improvement Projects. For purposes of this two-year grant, the

MassHealth Measurement Team has identified two quality improvement projects: Initiation and

Engagement in Alcohol and Other Drug Dependence Treatment (IET) and Post-partum Visit

(PPV). These topics were determined by reviewing the results of MassHealth HEDIS

measurement as related to the Adult Core Measure Set (see Table 3). Using the criteria of

relevance of MassHealth initiatives, relevance to MassHealth members and room for

improvement, the Team identified these as the QIPs.

Table 3: Trends in MassHealth HEDIS measures 2005-2012

	2012	2011	2010	2009	2008	2007	2006	2005
Prevention and Health Promotion								
Breast Cancer Screening Ages 42-51 Changed in 2009: Ages 40-69		67.2%		64.9%		58.9%		66.2%
Ages 52-69		Retired		Retired		68.2%		
Cervical Cancer Screening		76.2%		77.4%		78.6%		78.6%
Chlamydia Screening in Women: Age 21 to 24 Years	73.1%		70.4%					
Management of Acute Conditions								
Follow-up After Hospitalization for Mental Illness								
7 Day	55.9%		58.3%		55.9%	56.9%		48.8%
30 Day	75.2%		78.3%		75.8%	76.2%		68.3%
Management of Chronic Conditions								

	2012	2011	2010	2009	2008	2007	2006	2005
Comprehensive Diabetes Care								
HbA1c Testing (annual)	90.2%			90.7%		88.3%	87.4%	
LDL -C Screening	81.4%			83.3%		79.1%	90.5%	
Controlling High Blood Pressure: Ages 16-85				60.7%		54.1%		64.3%
Antidepressant Medication Management								
Effective Acute Phase	47.6%		49.4%		44.4%	47.9%		44.9%
Effective Continuation Phase	32.7%		33.6%		28.9%	32.9%		29.2%
Availability								
Initiation and Engagement of Alcohol and Other Drug (AOD) Dependence Treatment								
Initiation of Treatment		52.7%		49.1%		49.4%		41.3%
Engagement of Treatment		19.9%		23.6%		20.6%		20.1%
Prenatal and Postpartum Care: Postpartum Care		68.7%		64.0%		59.0%		60.5%

The IET QIP relates to several initiatives of critical importance to MassHealth. First, MassHealth re-procured its behavioral health carve out for the PCC Plan in 2012. One of the more important aims of the re-procurement was to advance the integration of behavioral health and medical services. Second, integration of behavioral health and medical services is also the center of the newly approved initiative for dually eligible members. And finally, the integration of BH and medical forms a central theme for the Primary Care Payment Reform initiative being launched in the winter of 2012-2013. The specifications of the IET measure allow the initial claim with a qualifying diagnosis to appear in the primary care setting, making this a potentially important measure of integration. As shown in Table 3, there is ample room for improvement in this measure.

The second proposed QIP relates to postpartum visits. Although the rates for this measure have improved over time, there is still room for improvement. The PPV is not only important for the health of the new mother but also for the health of the baby. As appreciation grows regarding

the prevalence of post-partum depression and its impact on the infant, it becomes even more important that women keep their post-partum visit. Both QIPs will seek to answer the following questions: (1) What are the root causes of the low rates? (2) What strategies can be applied to improve the rates?

The QIPs will be implemented using continuous quality improvement methods. Two multi-agency workgroups will be established for each topic. For example, the IET project workgroup will most likely include representatives from the MDPH's Bureau of Substance Abuse Services. The PPV project will engage individuals from MDPH's Bureau of Community Health and Prevention and Bureau of Family Health. The broad outline for the QIP process to be followed is modeled on Plan-Do-Study-Act.

Plan. The first task for both workgroups will be to formulate the overall aim of their projects in clear language. The aim statement articulates what is to be accomplished by the project, how the group will know that a change is an improvement, and what changes may be considered (see www.ihi.org). While developing the aim statement the workgroups will consider why this problem is a priority for MassHealth, what about the problem is within MassHealth's scope of influence, what specific population(s) the problem affects and how a project focusing on the problem will address health status, functional status, satisfaction, or processes of care. The workgroups will identify measures that they plan to use assess success over the course of the project. As the work of the project evolves, measures may be added or refined as tests of interventions are identified.

Next the workgroups will thoroughly examine and describe the current environment and seek to identify the root causes of the issue. What is the real problem? For example, how do regulations and laws around substance abuse treatment affect a member's ability to access

services? Or a provider's ability to bill for services? Do women in certain geographic locations appear to have lower rates of PPV than women in other areas? What are the root causes of the low rates?

As part of the root cause analysis, the workgroups will describe the data and other information gathered and analyzed to understand the barriers or causes of the problem that affects health status, functional status, satisfaction, or processes of care. The workgroups will document what data and information they used to understand the problem. An early task for the QIP workgroups will be to understand the data underlying each rate. The IET workgroup may ask questions such as where else might members be receiving substance abuse services. MassHealth members may be receiving substance abuse treatment in MDPH programs, treatment that does not result in a MassHealth claim and thus is not captured by the IET rate.

The root cause analysis will result in a list of barriers that may possibly be mediated by an intervention. The workgroups may group barriers into member-, provider- or system-related issues. Understanding barriers will allow the workgroups to identify potential improvements and to develop a theory of how the improvement will work. The theory of improvement is a hypothesis of how a measure result will change due to the intervention. At this point the workgroups will be ready to list a set of potential actionable interventions to achieve their aim as outlined at the beginning of the project.

After outlining a series of interventions to be tested, the groups will formulate the proposed tests of interventions as SMART objectives (specific, measureable, actionable, realistic and timely). This step may require adding testing cycle measures so that the team can gauge whether the test is working. Finally, before beginning testing phase, the workgroup will draft an action plan with dates and responsibilities.

Do. Interventions are tested in cycles, with data collection, and analysis. What happened during the intervention? What do the data show?

Study: During the study phase, the workgroup reflects on the analysis of data from the intervention and documents of the lessons learned from the tests.

Act: The workgroup now makes a decision to either adopt the intervention, or adapt the intervention and try again, or abandon the intervention and select another intervention to test. The later two options start the cycle again with a modified planning phase.

Strategy Three - Sustaining Improvement. We envision transforming, over time, the committee structure developed to oversee the execution of the QIPs into a sustainable infrastructure to review and act upon the results of quality measurement. We foresee a MassHealth Quality Improvement Committee comprised of staff from various units within MassHealth as well as partners from MDPH and DHCFP with special expertise in reviewing measurement results for viable opportunities for improvement. This Committee would also have the authority to direct staff within their units to design and implement QI projects.

Workplan for Aim Three

Responsible: MassHealth Office of Analytics and MassHealth Quality Office

Time Frame: October 31, 2012 – End Date: October 30, 2014

Milestones for Aim Three	Start	Finish	Lead Responsible
Convene Workgroups to design QIPs; identify baseline measures	November 2012	February 2013	MQO
Perform root cause analysis of problems	March 2013	October 2013	MQO
Identify barriers, opportunities and potential interventions	November 2014	January 2014	MQO
Test interventions in cycles of improvement	February 2014	October 2014	MQO
Design and charter MassHealth Quality Improvement Committee	March 2014	October 2014	MQO + MOA

3.3. Management plan

This management plan describes the reporting and accountability structures necessary to oversee the project. The MassHealth Office of Analytics under the direction of Marian Wrobel, Ph.D. will oversee the entire grant. The Project Manager will reside in the Office of Analytics. The MassHealth Quality Office will support the Office of Analytics in the following key areas: procurement and vendor management, annual HEDIS reporting, and management of the quality improvement projects. The core project team (MOA, MQO, MDPH, and DHCFP) will meet weekly during the first six months of the grant to troubleshoot and monitor implementation progress. Communication with all partners will be managed through the MOA by the project manager.

3.4. Monitoring plan

The milestones for each project Aim have been described above in Sections 3.2.1, 3.2.2 and 3.2.3 under "Workplans." Table 4 shows the deliverables associated with each milestone.

Table 4: Milestones and Deliverables

Milestone	Deliverable
Aim One	
Select measures for reporting and quality improvement projects	Measure set for 2014 and 2015 reporting Two quality improvement projects
Engage 2013 HEDIS stakeholders around slate realignment	Meeting with MCO quality managers
Implement 2013 HEDIS measures	June 2013 submission to NCQA by all plans
Implement 2014 HEDIS measures	June 2014 submission to NCQA by all plans
Develop process for collecting non-HEDIS measures, negotiate data-share agreements	Data share agreements with MDPH and DHCFP
Implement additional measures	Numerators, denominators and rates for all additional measures
Report to CMS – Phase One	Submission to CMS 2014
Report to CMS - Phase Two	Submission to CMS 2015
Sustainability Plan	Written and approved sustainability plan, Fall 2014
Aim Two	
Post and hire MassHealth project manager/analyst	Project manager hired
Procure NCQA-certified HEDIS software vendor	Software vendor procured

Milestone	Deliverable
	Software installed
Train MassHealth staff in use of HEDIS software	MassHealth staff proficient in using HEDIS software
Design data use training	Course in using data to make decision including course objectives, PowerPoint slides, exercises, other handouts
Implement training	Course delivered to multiple groups
Aim Three	
Convene Workgroups to design QIPs	Two multi-agency workgroups convened to oversee the design and implementation of QIPs
Collaboratively implement QIPs	Develop and use written work plan
Track QIP progress and institute refinements as needed	Develop and use written work plan
Design and charter MassHealth Quality Improvement Committee	Create written charter for the Committee

3.5 Stakeholder involvement.

The development of this proposal primarily involved internal MassHealth stakeholders including the Measurement Team, quality managers within several MassHealth programs, and the Directors of those programs. Other agency stakeholders consulted included Miriam Drapkin, *Assistant Commissioner for Health Policy,* DHCFP and Iyah Romm, *Director of Policy, Health Planning, and Strategic Development,* MDPH Health Care Safety & Quality.

4. Reporting and Evaluation

4.1 Collecting data for the core measure set – Aim One

Data for the Core Measure Set will be obtained from several different sources. Most of the measures will use pre-existing HEDIS processes. This means that the capitated MCOs will collect the measures and submit them to NCQA in June of 2013 and 2014 as usual. The funds provided by the grant will permit the collection for the MassHealth PCC Plan of an expanded slate of HEDIS measures.

Some measures require new processes. Depression Screening/Follow may need MassHealth to explore the cost versus benefit of requiring the use of CPT II codes to collect this measure as contrasted

with medical record review. Depending on how CMS specifies the Adult Asthma Admissions measure, the data may come from either DHCFP or MassHealth. Elective Delivery will require data share agreements between MassHealth and the MDPH. The Care Transitions measure also poses data collection challenges and may require new data submission processes.

4.2 Collecting data to drive quality improvement - Aim Three

Aim Three calls for MassHealth to conduct analyses of disparities. This requires the manipulation of data at the level of the individual member since disparities are tied to individual member characteristics. MassHealth will ask the contracted capitated managed care plans for member-level HEDIS results to be submitted in August of each year. The Measurement Team has tentatively identified the following measures for stratification: Postpartum care rate and cervical cancer screening. In addition, the Measurement Team has discussed evaluating Elective Deliveries for a disparities drill-down. The Division of Health Care Finance and Policy requires standard race and ethnicity data to be reported with hospital discharges. This provides a unique opportunity to conduct race and ethnic stratifications on the Elective Deliveries measure.

4.3 Reporting

MassHealth will report on the results of the Adult Core Measure Set to CMS in January of 2014 and 2015. MassHealth will also prepare the required semi-annual and annual progress reports.

4.4 Evaluation plan

The evaluation for this project will focus on collecting information to inform future decision-making about sustaining both measure reporting and quality improvement in MassHealth. The key evaluation questions will be: (1) What is the most efficient way to collect and report federally required measures; and (2) What is the feasibility of implementing and sustaining quality improvement at a state agency level?

The key issue for the first evaluation question is "Does the benefit from using NCQA-certified software justify its expense?" Historically, limited staff resources in MassHealth for quality measurement activities have restricted the number of HEDIS measures that could be calculated. Software dramatically broadens the scope of possible measurement. Software also facilitates the stratification of data. Sub-questions may include: "What are the staff resources (personnel and time) required to install the software and learn to use the software?" "What are staff perceptions of the usefulness of the software?" "How widely are MassHealth staff aware of and use the data produced by the software?" Similarly, "Are MassHealth executives aware of and do they use the data?"

The second evaluation question speaks to the degree of leverage a state agency has in driving quality improvement. Typically quality improvement projects are executed at the individual provider level. The toolbox of interventions available to a state agency is vastly different than what is available to an individual provider.

The evaluation for this project will first flesh out the evaluation questions. Next the evaluation will identify data sources and metrics for the evaluation. We anticipate that the evaluation will include both qualitative and quantitative methods of data collection.