MHCC-13-024

Practitioner Performance Measurement (PPM) Planning Process

Phases 2 & 4:
Development of a Practitioner Performance Measurement System
&
Technology Solutions for Public Reporting of Practitioner Performance Measures

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Executive Summary

The Discern Team utilized our training in Qualified Entity (QE) Certification and our readiness assessment of the All-Payer Claims Database (APCD) in Phase 1 to outline the structure of performance reporting for the new Practitioner Performance Measurement (PPM) system in Phase 2. We have also planned for the actual operation and products of the practitioner performance measurement system in Phase 4 and have recommended solutions that will be built into the Request for Proposal (RFP) specifications in Phase 5.

What is important to note is that the work recommended here will commence at least a year after the RFP is drafted. Changes that may occur during that year could include modifications to the QECP requirements, availability of additional measures or discontinuation of some that have been included, greater availability and consistency of EHR data, etc. Therefore, the Discern Team has made general recommendations supported by detail representing how the situation looks to us now. The most high-level information in the report includes recommendations related to how measures may be rolled out in cycles over time, and advice received from the Work Ggroup thus far.

Based upon our analysis and outline of the structure of the PPM system, the Discern Team's recommendations include the following:

- Selection of a contractor is crucial. The contractor must supplement MHCC capabilities in the areas of validity testing, accuracy testing, following specifications, and especially data security for beneficiary-identifiable data.

- The biggest challenge for the PPM, particularly for using the APCD data, is our existing recommendation to obtain patient identifiers for the commercial data in order to use those data along with Medicare data in releasing reports to practitioners for their review and correction. The Work Group strongly recommends this, and it will require a change in the regulations. MHCC could begin pursuing this while waiting for the availability of SIM funding.

- PPM reports should be at least as useful as the existing MHCC hospital reports. Therefore, engaging consumers to the same depth they have been engaged for the hospital reports, and using the feedback MHCC has received on these reports, will be crucial. This is another activity that might begin during the period of waiting for the main funding.

Summarized feedback from the PPM Work Group held on September 24, 2013 to review and engage in an active discussion about information contained in this report is included at the end of the Stakeholder Engagement section.

Phase 2: Development of a Practitioner Performance Measurement System

Introduction

The goal of Phase 2 is to build the structure of performance reporting for the new Practitioner Performance Measurement (PPM) system. In this phase, The Discern Team utilized our training in Qualified Entity (QE) Certification, what we have learned from the project in supporting MHCC's development of QE status, and our PPM All-Payer Claims Database (APCD) readiness assessment in Phase 1.

MHCC's plan is to begin the performance reporting system focusing on what is both meaningful and feasible in the shorter term. Once the performance measurement system supports the initial reports, MHCC intends to enlarge the program with additional measures and ratings, and an eye toward a more comprehensive, robust program over time.

Evaluation of Core Quality Metrics under Consideration by MHCC

Performance Measure Conformance with Qualified Entity Certification Program (QECP) Requirements

Effective January 1, 2012, Section 10332 of the Affordable Care Act (ACA) amends the Social Security Act by requiring standardized extracts of Medicare Parts A and B claims data and Part D drug event data to be made available to Qualified Entities (QEs) to evaluate the performance of providers of services (providers) and suppliers. As such, performance improvement initiatives which have mostly been conducted without the benefit of Medicare fee-for-service claims data, now have access to information from the largest payer of health care services.

Insomuch as the PPM program is interested in aggregating Medicare data with the All-Payer Claims Database (APCD), the PPM program will need to be certified as a QE to gain access to the data. The Qualified Entity Certification Program (QECP) is designed to evaluate existing performance reporting entities for their ability to function as QEs, and contingent on the entities meeting or exceeding certain standards, to provide them with Medicare data to enhance their current performance measurement efforts. The QECP is guided by the following principles: public reporting of provider and supplier performance, transparency, standardization and sound methodology of measures, privacy and protection, and evaluation, monitoring and oversight.

The process of meeting requirements to be certified as a QE consists of four phases. Across the 4 phases of the QECP, entities must supply evidence of meeting the following eight standards:

- Applicant Profile
- Data Sources
- Data Security and Privacy
- Methodology for Measurement and Attribution
- Measure Selection
- Verification Process
- Reporting of Performance Information
- Requests for Corrections or Appeals

1. CMS Phase 1: Application for Certification,
    a. Describe applicant profile (lead entity plus contracts with other entities that make it possible for applicant to meet QECP standards) and timeline for meeting all program

requirements, define geographic areas the reports will cover (must be area for which applicant already has other data), describe providers for whom performance will be assessed (must have other data on these providers), show availability to cover costs of performing functions of a QE, and obtain claims data from at least one other payer source. For relevant standards 1A-1D and 2A, evidence is required.

b. Describe *plans for implementing* technical requirements of reporting and attest to having required experience level. For phase 1, self-assessment of ability to meet standards 3, 2B, 4, 5, 6, 7, & 8 is sufficient. Evidence will be presented and reviewed under Phase 2 for standard 3 and under Phase 3 for the following:

i. attribution of patients

ii. aggregation of claims data

iii. choice of standard and alternative measures

iv. calculation of measures following specifications

v. application of risk adjustment

vi. internal quality control

vii. security protection of beneficiary-identifiable data

viii. release of data to providers

ix. acceptance of providers' requests for correction or appeals

2. CMS QE Phase 2: Data Security
   a. Undergo audit by security firm
   b. When passed, receive Medicare data
3. CMS QE Phase 3: Data Integration and Measure Calculations
   a. Produce reports according to plans
   b. Undergo review/audit of all steps in 1b above, including demonstrating actual integration of Medicare data and evidence of previous experience where relevant
4. CMS QE Phase 4: Reporting
   a. Release data to providers 60 calendar days before reporting to public; provider corrections and appeals
   a. Release of public reports
   b. Undergo audit of all procedures.

Appendix A displays the CMS schematic of the QECP process. The goal of the QECP in terms of timeframe is for QEs to publicly report performance information on providers by 12 months after QE certification; however, there apparently is flexibility in this 12 month timeline, given the experience of other organizations that have already been certified but have not yet received data. Appendix B displays the QECP Application Process Flow Diagram, which is helpful in illustrating the process by which the QE applicant submits information and is evaluated in each step of the process for the four phases.

Assessment of PPM Program with QECP Conformance

The Discern Team reviewed QECP programmatic documentation to determine the assessment for each applicable standard and element for each of the four phases, the evidence required to meet each element, and any associated example documentation provided. Appendix C provides a snapshot of QECP Phase 3 evidence requirements, delineating when evidence is required from PPM program past experience, when evidence is required from the actual integrated Medicare data as part of the PPM program implementation, or both. Based upon all of the aforementioned requirements, the Discern Team evaluated PPM program conformance with these standards, and

outlined an approach to meet these requirements. The result of this analysis is summarized in Table 1, below.

Table 1: Description of Standards and Elements for each of Four QECP Phases and the Recommended Approach for QECP Conformance

Standard/Element	Description of Element and Recommended Approach to Address Requirement
Phase 1: Application for Certification	
Standard 1: Applicant Profile	
1A	Define applicant organization: Includes letter of commitment plus an estimated commitment timeline, indicating when standards 3, 2B, 4, 5, 6, 7, 8 will be complete, when first public reports will be released (i.e., within 1 year), and dates by which applicant will meet compliance for those elements the applicant self-assessed as not meeting compliance. Also, a Contractual Relationship Attestation if partnering with contractors or member organizations to meet the standards.
	Approach: MHCC should be legally recognized as the "lead" entity accountable to CMS for the receipt of Medicare data. As such MHCC would complete a Letter of Commitment (template provided by QECP) signed by a Senior Executive, demonstrating commitment to participate fully as a QE. A first addendum to this letter would include the estimated commitment timeline as described above (template provided by the QECP). Timeline recommendations are included later in this report. A second addendum to this letter would include a Contractual Relationship Attestation for those entities MHCC partners with to meet the QECP standards, (template provided by QECP) signed by MHCC's Application Lead/Manager. Any contractors or member organizations working with MHCC on the PPM would require a contractual relationship, which includes breach of contract liability with potential for collecting damages for failure to perform. *Of note, if MHCC contracts with a vendor to help MHCC meet QECP standards (i.e., previous experience requirements), that contract must be in place at the time MHCC applies for QECP certification.*
	PPM Program Conformance as of Sept, 2013: The PPM program is in a position to meet this element once it has decided upon a program timeline and it has contracts in place with vendor(s) needed to help meet QECP requirements.
1B	Identify the geographic areas that applicant's reports will cover
	Approach: The geographic region for which the PPM program is requesting Medicare data should match the geographic region for which the PPM program already has other payer data. The PPM program will need to provide documented evidence to support that it is requesting Medicare data for the entire state of Maryland and that it currently has claims data from several payer source(s) for the entire state of Maryland including from CareFirst, United HealthCare, and Aetna. The PPM program could submit Maryland regulations to demonstrate the required submission of data by payers and documentation from the All-Payer Claims Database (APCD) contractor to document

Standard/Element	Description of Element and Recommended Approach to Address Requirement
	it has this data.
	PPM Program Conformance as of Sept, 2013: The PPM program is in a position to meet this element.
1C	Identify the types of providers or suppliers who performance the applicant intends to assess using Medicare data. Types of providers can include: (a) Physicians, (b) Other health care practitioners, (c) Hospitals, (d) Critical access hospitals, (e) Skilled nursing facilities, (f) Comprehensive outpatient rehabilitation facilities, (g) Home health agencies (h) Hospice programs, and (i) Other facilities or entities that furnish items or services
	Approach: The providers for which the PPM program is requesting Medicare data should match the providers for which the PPM program already has other payer data. The PPM program will need to provide documented evidence to support that physicians in Maryland will be the type of provider for which performance reports will be produced.
	PPM Program Conformance as of Sept, 2013: The PPM program is in a position to meet this element.
1D	Show ability to cover the costs of performing the required functions of a QE
	Approach: The PPM program will need to submit a program budget, reviewed, approved and signed by MHCC's Senior Executives in order to convey how MHCC's business model is projected to cover the cost of public reporting, including the cost of the data and the cost of developing the reports. The documentation should include program structure, budget and unit responsible for performance reporting.
	PPM Program Conformance as of Sept, 2013: The PPM program will be in a position to meet this element once it has determined the program structure, budget, and funding source for the PPM program.
Standard 2: Data Sources	
2A	Obtain claims data from at least one other payer source to combine with Medicare Parts A and B claims data, and Part D drug event data
	Approach: The PPM program will need to provide documentation to demonstrate it obtains claims data from at least one other payer source, there is an obligation for that payer to provide the data, and what the market share of those claims in that region represents. The PPM program can demonstrate this by showing that it possesses claims data for physicians in the state of Maryland from several sources, including CareFirst, United HealthCare, and Aetna; i.e.,, the carriers that in 2011 covered the majority of privately insured Maryland residents (approximately 4.2 million out of 4.9 million). Supporting documentation could include the regulations that require this, a signed agreement between MHCC and the payers (including the geographic area of coverage and types of providers and suppliers) if available and a description of the data sources (e.g., health plan member data). The PPM will also submit the QECP Data Source Attestation (template provided by QECP) which requires information on the number of covered lives,

Standard/Element	Description of Element and Recommended Approach to Address Requirement
	the geographic region and the types of providers covered in the payer data.
	PPM Program Conformance as of Sept, 2013: The PPM program is in a position to meet this element.
SELF ASSESSMENT (for 3, 2B, 4, 5, 6, 7, & 8)	For Phase I, self-assessment of the remaining standards and elements will not require uploading of evidence. In general, the PPM program must be currently compliant, and hence self-assess as compliant, with all of the QECP elements. However, if the PPM program determines it is not compliant with one of the elements in a standard, it must describe how and when it plans to meet the element requirement. The date by which an applicant will meet compliance for the relevant element should be included in the PPM program's Commitment Timeline (1A)
	Approach: The PPM program will need to self-assess (evidence not required here) it has met all remaining elements at the time of application, and for those items where it may not be compliant, describe how and when it plans to meet the requirement.
	PPM Program Conformance as of Sept, 2013: The degree to which the PPM program is currently in conformance with standards 3, 2B, & 4-8 are described in detail below.
Phase 2: Data Security:	
Standard 3: Data Security: Further detail regarding all security element requirements is discussed in PPM Program Planning Phase 4 report	
3A	(Administrative): Show ability to comply with Federal data security and privacy requirements, and document a process to follow those protocols. See PPM Program Planning Phase 4 report for additional details.
	Approach: The PPM program will likely need to contract with a vendor who is experienced in this approach and can help the PPM program meet these requirements.
	PPM Program Conformance as of Sept, 2013: The PPM program will be in a position to meet this element once it has contracted with a vendor who is experienced in this approach and can help the PPM program meet these requirements.
3B	(Technical): Identify system users and prequalification process for access to data. See PPM Program Planning Phase 4 report for additional details.
	Approach: The PPM program will likely need to contract with a vendor who is experienced in this approach and can help the PPM program meet these requirements.
	PPM Program Conformance as of Sept, 2013: The PPM program will be in a position to meet this element once it has contracted with a vendor who is experienced in this approach and can help the PPM program meet these requirements.

Standard/Element	Description of Element and Recommended Approach to Address Requirement
3C	(Physical): Identify processes and systems in place to protect the IT physical infrastructure. See PPM Program Planning Phase 4 report for additional details.
	Approach: The PPM program will likely need to contract with a vendor who is experienced in this approach and can help the PPM program meet these requirements.
	PPM Program Conformance as of Sept, 2013: The PPM program will be in a position to meet this element once it has contracted with a vendor who is experienced in this approach and can help the PPM program meet these requirements.
Phase 3: Data Integration and Measure Calculation	
Standard 2: Data Sources	
2B	Accurately combine Medicare claims data with claims data from other payer sources
	Approach: This element requires evidence of 3 or more years' experience accurately combining claims data from at least one other payer source with Medicare data to produce at least two performance measures, as demonstrated by respective performance measurement reports. The element also requires evidence of the actual integration of claims data from at least one other payer source with Medicare data as part of the PPM program under the QECP as demonstrated by methods for matching provider identifiers across different claims data sources, processes implemented to test the accuracy of data linkage and correct data linkage errors, and error reports demonstrating the volume of data linkage errors.
	PPM Program Conformance as of Sept, 2013: Evidence of Experience: The extent to which MHCC is in a position to meet this part of the element is dependent upon whether it can show at least 3 years' experience combining claims data from at least two sources, as demonstrated by performance measurement reports for at least two measures. In addition, experience from any PPM program contractor is also relevant to meeting this element. As such, if MHCC cannot meet this experience requirement on its own, the PPM program should choose a vendor to work with that has at least 3 years' experience combining claims data from different payer sources. Evidence of Actual Integrated Medicare Data in the PPM program under the QECP: The PPM program will be in a position to meet this part of the element once it has solidified methods for matching provider identifiers (e.g., NPI) across Medicare and other claims data sources within the APCD as part of the PPM program under the QECP, has tested the accuracy of the process and understands the extent of the potential errors.

Standard/Element	Description of Element and Recommended Approach to Address Requirement
Standard 4: Methodology for Measurement and Attribution	
4A	Follow measure specifications
	Approach: The PPM program will need to obtain detailed measure specifications from the steward for each of the measures (listed in 5A and 5B) it intends to use to evaluate the performance of physicians. From some initial research, it appears that most NQF endorsed measures should be available without charge, though there are some exceptions related to obtaining ETG type information for cost of care measures. Measure specifications for implementation will also need to be provided if different from the measure steward's specification. In addition to the basic specifications, the clinical logic and construction logic must also be detailed out. The PPM will need to understand if these components are available from the steward or as part of the original specification or whether they need to be developed as part of the programming of it. Finally submission of system input/output reports/logs for each measure displaying data sources, exclusion statements, denominator and numerator values would be fulfilled after the measure logic has been programmed, and results have been calculated. As part of the QECP process the PPM program will need to fill out the QECP measure information workbook.
	PPM Program Conformance as of Sept, 2013: Evidence of Actual Integrated Medicare Data in the PPM program under the QECP: The PPM program will be in a position to meet this element once it has decided on the list of measures it will be using in the PPM program in year 1, retrieves the most up-to-date specifications from the stewards, decides on any program related algorithm logic, programs the measures and calculates results using PPM program data.
4B	Use a defined and transparent method for attribution of patients and episodes
	Approach: The PPM program will need to decide on the methodology for how it attributes patients or episodes to primary care and specialty care physicians. The methodology will need to be transparent to providers and the public, for example as included in a publicly available methodology document. If attribution methods vary across measures (listed in 5A and 5B), this should be described accordingly. For example assigning patients to providers for quality measures will likely be different than assigning episodes to physicians for cost measures. Also attribution methods for primary care may be different than for specialists. In addition, the PPM will need to demonstrate experience using an attribution methodology for 3 years or more years for at least 2 measures.
	PPM Program Conformance as of Sept, 2013: *Evidence of Experience:* The extent to which MHCC is in a position to meet this part of the element is dependent upon whether it can show at least 3 years' experience using an attribution methodology for at least 2 performance measures along with the rationale for any changes in the methodology over the 3 years. In addition, experience

Standard/Element	Description of Element and Recommended Approach to Address Requirement
	from any PPM program contractor is also relevant to meeting this element. As such, if MHCC cannot meet this experience requirement on its own, the PPM program should choose a vendor to work with that has at least 3 years' using an attribution methodology for at least two measures. *Evidence of Actual Integrated Medicare Data in the PPM program under the QECP:* The PPM program will be in a position to meet this part of the element once it has solidified methods for and has attributed patient services or episodes to specific providers within the PPM program under the QECP. The PPM program must also demonstrate that it has disseminated key attribution methodology descriptions to providers and the public.
4C	Set and follow requirements to establish statistical validity of measure results for quality measures
	Approach: The PPM program will need to decide on and describe the methodology for how it establishes statistical validity of measure results for quality measures (i.e., at least 30 observations, or the calculated confidence interval is at least 90%, or the measure reliability is at least 0.70). The methodology will need to be transparent to providers and the public, for example as included in a publicly available methodology document. Once the methodology is decided upon, the results of validity testing for each of the measures to be included in the performance reports needs to be shown. The PPM will also need to demonstrate validity requirements for measures reported in previous performance reporting efforts over the past 3 years for at least 2 quality measures.
	PPM Program Conformance as of Sept, 2013: *Evidence of Experience:* The extent to which MHCC is in a position to meet this part of the element is dependent upon whether it can show at least 3 years' experience producing at least 2 quality measures that have met predetermined statistical validity requirements. Experience from any PPM program contractor is also relevant to meeting this element. As such, if MHCC cannot meet this experience requirement on its own, the PPM program should choose a vendor to work with that has at least 3 years' producing quality measures with statistical validity. *Evidence of Actual Integrated Medicare Data in the PPM program under the QECP:* The PPM program will be in a position to meet this part of the element once it has solidified methods for and has completed validity testing on the measures it intends to report in the PPM program under the QECP. The PPM program will need to provide a description of the minimum validity requirements for reporting (e.g., predetermined sample/denominator size, confidence interval, or reliability score) and the results of the actual testing for each measure. The PPM program must also demonstrate that it has disseminated key validity methodology descriptions to providers and the public.
4D	Set and follow requirements to establish statistical validity of measure results for efficiency, effectiveness, and resource use measures

Standard/Element	Description of Element and Recommended Approach to Address Requirement
	Approach: The PPM program will need to decide on and describe the methodology for how it establishes statistical validity of measure results for each efficiency, effectiveness and resource use measure (e.g., sample/denominator size, confidence interval, or reliability score). The methodology will need to be transparent to providers and the public, for example as included in a publicly available methodology document. Once the methodology is decided upon, the results of validity testing for each of the measures to be included in the performance reports needs to be shown, including the actual sample/denominator size and either the reliability score or the confidence interval. The PPM program will also need to describe for selected efficiency, effectiveness, and resource use measures that specify the use of a standardized payment or pricing approach, the specified standardized payment methodology that is used. Finally, the PPM will need to demonstrate validity requirements for efficiency/effectiveness/ and resource use measures reported in previous performance reporting efforts over the past 3 years for at least 2 of the same (or related) measures that will be included in the PPM program's performance reports.
	PPM Program Conformance as of Sept, 2013: Evidence of Experience: The extent to which MHCC is in a position to meet this part of the element is dependent upon whether it can show at least 3 years' experience producing efficiency, effectiveness or resource use measures that have met predetermined statistical validity requirements. Experience from any PPM program contractor is also relevant to meeting this element. As such, if MHCC cannot meet this experience requirement on its own, the PPM program should choose a vendor to work with that has at least 3 years' producing quality measures with statistical validity. In addition, if the PPM program will include efficiency, effectiveness or resource uses measures, it must choose two (or a related two) for the program that have been used over the past 3 years. Evidence of Actual Integrated Medicare Data in the PPM program under the QECP: The PPM program will be in a position to meet this part of the element once it has solidified methods for and has completed validity testing on the efficiency, effectiveness and resource uses measures it intends to report in the PPM program under the QECP. The PPM program will need to provide a description of the minimum validity requirements for reporting (e.g., predetermined sample/denominator size plus either the confidence interval or reliability score) and the results of the actual testing for each measure including the sample/denominator size and either the reliability score or the confidence interval. The PPM program must also demonstrate that it has disseminated key validity methodology descriptions to providers and the public. Finally the PPM program must describe the standard payment methodology implemented for applicable measures included in the PPM program performance reports, if applicable.
4E	Use appropriate methods to employ risk adjustment

Standard/Element	Description of Element and Recommended Approach to Address Requirement
	Approach: The PPM program will need to decide on and describe for each measure, the rationale for using or not using risk adjustment, with a detailed justification for not using risk adjustment. For each measure for which risk adjustment is applied, the methodology used for risk adjustment (including case-mix or severity adjustment) should be documented. The methodology and results will need to be transparent to providers and the public, for example as included in a publicly available methodology document. The PPM will also need to demonstrate consideration of risk adjustment, use of risk adjustment or justification for not using risk adjustment in previous performance reporting efforts over the past 3 years.
	PPM Program Conformance as of Sept, 2013: *Evidence of Experience:* The extent to which MHCC is in a position to meet this part of the element is dependent upon whether it can show at least 3 years' experience considering risk adjustment, using risk adjustment methodologies and/or justification for not using risk adjustment in previous performance reports. In addition, experience from any PPM program contractor is also relevant to meeting this element. As such, if MHCC cannot meet this experience requirement on its own, the PPM program should choose a vendor to work with that has at least 3 years' using a risk adjustment methodology. *Evidence of Actual Integrated Medicare Data in the PPM program under the QECP:* The PPM program will be in a position to meet this part of the element once it has determined its rationale for using or not using a risk adjustment methodology for each measure in the PPM program, applied the methodology to applicable measures and justified no risk adjustment for ones where it was determined not necessary. The PPM program must also demonstrate that it has disseminated key risk adjustment methodology descriptions to providers and the public.
4F	Use appropriate methods to handle outliers
	Approach: The PPM program will need to decide on and describe for each measure, the rationale for using or not using an outlier method, with a detailed justification for not using an outlier method. For each measure for which an outlier method was applied, the methodology used for handling outliers should be documented. The methodology and results will need to be transparent to providers and the public, for example as included in a publicly available methodology document. The PPM will also need to demonstrate identification of outliers, use of outlier methods, or justification for not using outlier methods in previous performance reporting efforts over the past 3 years for each type of measure.

Standard/Element	Description of Element and Recommended Approach to Address Requirement
	PPM Program Conformance as of Sept, 2013: *Evidence of Experience:* The extent to which MHCC is in a position to meet this part of the element is dependent upon whether it can show at least 3 years' experience handling outliers (e.g., identifying outliers, use of outlier methods, or justification for not using outliers) for performance reports for each type of measure. In addition, experience from any PPM program contractor is also relevant to meeting this element. As such, if MHCC cannot meet this experience requirement on its own, the PPM program should choose a vendor to work with that has at least 3 years' handling outliers. *Evidence of Actual Integrated Medicare Data in the PPM program under the QECP:* The PPM program will be in a position to meet this part of the element once it has determined its rationale for handling outliers for each measure in the PPM program, applied the methodology (how identified and how accounted for) to applicable measures and justified no outlier handling for ones where it was determined not necessary. The PPM program must also demonstrate that it has disseminated key outlier methodology descriptions to providers and the public.
4G	Use comparison (peer) groups when evaluating providers or suppliers compared to each other
	Approach: The PPM program must define for each measure, how the peer group was identified, the algorithm used to identify peer groups, and the geographic parameters that were used to compare providers to their peers. The methodology and results will need to be transparent to providers and the public, for example as included in a publicly available methodology document. The PPM will also need to demonstrate how peer groups were defined in previous performance reporting efforts over the past 3 years.
	PPM Program Conformance as of Sept, 2013: *Evidence of Experience:* The extent to which MHCC is in a position to meet this part of the element is dependent upon whether it can show at least 3 years' experience defining peer groups for prior performance reports. In addition, experience from any PPM program contractor is also relevant to meeting this element. As such, if MHCC cannot meet this experience requirement on its own, the PPM program should choose a vendor to work with that has at least 3 years defining peer groups. *Evidence of Actual Integrated Medicare Data in the PPM program under the QECP:* The PPM program will be in a position to meet this part of the element once it has solidified methods for and has defined peer groups for providers within the PPM program under the QECP. For example, peer groups may be defined as within same specialty (e.g., pediatrics, to pediatrics, endocrinology to endocrinology) within a specified geographic proximity (e.g., within same county, within a 10mile radius, etc.) The PPM program must also demonstrate that it has disseminated key peer groups methodology descriptions to providers and the public.
4H	Use benchmarks when evaluating providers

Standard/Element	Description of Element and Recommended Approach to Address Requirement
	Approach: The PPM program must define for each measure, how the benchmark was identified or estimated, the type of benchmark used and the geographic parameters that were used to identify benchmarks, if relevant. The methodology and results will need to be transparent to providers and the public, for example as included in a publicly available methodology document. The PPM will also need to demonstrate how benchmarks were defined in previous performance reporting efforts over the past 3 years.
	PPM Program Conformance as of Sept, 2013: *Evidence of Experience:* The extent to which MHCC is in a position to meet this part of the element is dependent upon whether it can show at least 3 years' experience comparing measure results with benchmarks in performance reports. In addition, experience from any PPM program contractor is also relevant to meeting this element. As such, if MHCC cannot meet this experience requirement on its own, the PPM program should choose a vendor to work with that has at least 3 years' comparing measure results with benchmarks. *Evidence of Actual Integrated Medicare Data in the PPM program under the QECP:* The PPM program will be in a position to meet this part of the element once it has solidified methods for selecting benchmarks including how the benchmark is identified, the type of benchmark and any relevant geographic parameters. The PPM program must also demonstrate that it has disseminated key benchmarks methodology descriptions to providers and the public.
Standard 5: Measure Selection	
5A	Use standard measures
	Approach: For each of the measures the PPM program decides to include, it is required to document for standard measures, the NQF-endorsed measure number or CMS measure name or number, the name of measure, name of steward/owner and measure description. Also, once the measures have been applied in the PPM program, the program will need to document the type of provider to which each measure was applied, the rationale for selecting each measure, the relationship of each measure to existing measurement efforts, and relevance of each measure to the population in the covered geographic area.
	PPM Program Conformance as of Sept, 2013: *Evidence of Actual Integrated Medicare Data in the PPM program under the QECP:* The PPM program will be in a position to meet this element once it has decided on which measures will be included in the PPM program under the QECP. Currently all of the *quality* measures under consideration by the PPM program are standard measures because they are either NQF endorsed or used in a CMS program, and for these, the name of the measure, steward and # would be readily available. The additional documentation required after measure application can be produced based upon the clinical focus area of the measures, discussions of the workgroup (minutes) and/or a crosswalk of the

Standard/Element	Description of Element and Recommended Approach to Address Requirement
	measure focus areas to health care priorities in Maryland (program materials).
5B	Use approved alternative measures
	Approach: For each of the alternative measures the PPM program decides to include, it is required to document the name of measure, name of steward/owner and measure description. Also, once the measures have been applied in the PPM program, the program will need to document the type of provider to which each measure was applied, the relationship of each measure to existing measurement efforts, and relevance of each measure to the population in the covered geographic area. The PPM program must also produce evidence that the alternative measures are more valid, reliable, responsive to consumer preferences, cost effective or relevant to dimensions of quality and resource use not addressed by a standard measure, the date, time, location/dial-in, attendee list, and QECP alternative measure discussion summary from PPM program relevant meetings and approval or sign-off of relevant alternative PPM program measure meeting minutes from committee or committee chairs. Finally, the PPM program must have a process to monitor and evaluate if new scientific evidence is released or a related standard measure is endorsed. If new evidence or a standard measure is available, the PPM program must start using the new standard measure within 6 months or the QE can request, with supporting scientific documentation, approval to continue using the alternative measure. As such, the PPM program must provide evidence to support planned frequency of research, names and titles of staff responsible for research, and the sources to be referenced when researching whether alternative measures become standard.
	PPM Program Conformance as of Sept, 2013: *Evidence of Actual Integrated Medicare Data in the PPM program under the QECP:* The PPM program will be in a position to meet this element once it has decided on which measures will be included in the PPM program under the QECP. Currently the PPM program is considering a number of cost/efficiency/resource use alternative measures which are neither NQF endorsed or used in a CMS program. The information for those measures regarding name, steward and description would be readily available. Information on the provider types measured, relationship of the measure to existing measurement efforts and relevance of population in the covered geographic area can be produced based upon the clinical focus area of the measures, the discussions of the workgroup (minutes), and/or a crosswalk of the measure focus areas to health care priorities in Maryland (program materials). Information regarding defense of choosing alternative measures over standard measures as detailed in the approach section above will require documentation of discussions from stakeholder meetings. The process of monitoring the state of affairs with respect to alternative measures will require specific PPM program staff task duties.
Standard 6: Verification Process	

Standard/Element	Description of Element and Recommended Approach to Address Requirement
6A	Systematically evaluate accuracy of the measurement process and correct errors
	Approach: The PPM program must provide evidence to demonstrate the internal verification, audit process, or software used to evaluate the accuracy of calculating performance measures from claims data, in addition to the name, credentials, and title of staff responsible for verifying the measurement process, the process for correcting errors in measurement and reporting process, the process for updating reports to providers and consumers, and reports generated by the validation process. The PPM program must also document at least 3 years previous experience in evaluating the accuracy of the measurement process and correcting errors covering all relevant areas.
	PPM Program Conformance as of Sept, 2013: *Evidence of Experience:* The extent to which MHCC is in a position to meet this part of the element is dependent upon whether it can show at least 3 years' experience defining and verifying its measurement and reporting processes, including the correction of errors and updating of performance reports. In addition, experience from any PPM program contractor is also relevant to meeting this element. As such, if MHCC cannot meet this experience requirement on its own, the PPM program should choose a vendor to work with that has at least 3 years' experience with internal verification, audit process and/or software used to evaluate the accuracy of calculating performance measures from claims data. *Evidence of Actual Integrated Medicare Data in the PPM program under the QECP:* The PPM program will be in a position to meet this part of the element once it has solidified processes for internal verification, audit process, or software used to evaluate the accuracy of calculating performance measures from claims data; identified PPM program staff responsible for verifying the measurement process; developed the process for correcting errors in measurement and reporting processes and for updating reports to providers and consumers; and generated reports from the validation process. If using an external vendor, the PPM program has documentation of agreement and/or purchase order of the software and/or systems vendor utilized in the PPM program's validation process.
Standard 7: Reporting of Performance Information	
7A	Design reporting for providers, suppliers, and the public
	Approach: The PPM program will need to develop and submit as evidence, confidential provider performance reports and public performance reports that must include performance results/ratings, level of reporting, explanation of any provider rating approaches (such as number of stars), indication of whether or not each measure included Medicare data, description of each performance measure, and indication of performance measures in dispute. In addition, the PPM program will need to submit evidence to support that both provider and public report dissemination plans include information on how to locate reports, date of release and frequency of subsequent releases (at least

Standard/Element	Description of Element and Recommended Approach to Address Requirement
	annually), method of distribution, target audiences, and source of contact information for target audiences.
	PPM Program Conformance as of Sept, 2013: *Evidence of Actual Integrated Medicare Data in the PPM program under the QECP:* The PPM program will be in a position to meet this part of the element once it has developed and produced public and provider reports for the PPM program and provider and public dissemination plans including all aspects described in the approach above. Dissemination of information must occur to users at least *annually*.
7B	Improve reporting
	Approach: The PPM program must show evidence of results of previous evaluation of reporting over 3 years, such as testing with users and use of evaluation to improve reporting (e.g., focus group summaries, survey results, website evaluations, etc.). The evidence must include information related to how report designers collect user feedback, the definition of "user", action plans or next steps resulting from user feedback, including whether the step has been implemented, process evaluation documents from the past 3 years for previous reporting efforts and description of the PPM program's continuous and ongoing reporting improvement process.
	PPM Program Conformance as of Sept, 2013: *Evidence of Experience:* The extent to which MHCC is in a position to meet this element is dependent upon whether it can show at least 3 years' experience designing and continuously improving public reporting on health care quality, efficiency, effectiveness, or resource use. In addition, experience from any PPM program contractor is also relevant to meeting this element. As such, the PPM program should choose a vendor to work with that has at least 3 years' experience with the evaluation of reporting, testing with users and use of evaluation to improve reporting.
Standard 8: Requests for Corrections/Appeals	
8A	Use corrections process
	Approach: The PPM program must show evidence that it has established a process to allow providers to view reports (at least 60 days prior to public release) confidentially, request data, and ask for correction of errors before the reports are made public, including: a description of how provider performance reports (without beneficiary protected health information) will be transmitted to providers, the timeline to be followed in order to complete the corrections process prior to releasing reports to the public, description of how providers can request corrections prior to public reporting and evidence that demonstrates that the PPM program's corrections process has been in place for generally 3 years prior to application.

Standard/Element	Description of Element and Recommended Approach to Address Requirement
	PPM Program Conformance as of Sept, 2013: *Evidence of Experience:* The extent to which MHCC is in a position to meet this part of the element is dependent upon whether it can show at least 3 years' experience using a process by which providers view reports confidentially, request data, and ask for correction of errors before the reports are made public. In addition, experience from any PPM program contractor is also relevant to meeting this element. As such, if MHCC cannot meet this experience requirement on its own, the PPM program should choose a vendor to work with whose correction process has been in place for at least 3 years prior to application.
8B	Use secure transmission of beneficiary data
	Approach: The PPM program must show evidence that it has established a process that applies privacy and security protections to the release of beneficiary identifiers and claims data to providers for the purposes of the requests for corrections/appeals process. This would include a description of how beneficiaries' protected health information will be transmitted to the providers in the event of a request for correction, the name of organization/contractor responsible for transmitting beneficiaries' protected health information, and a description of the process that ensures only the minimum necessary beneficiary identifiers and claims data will be disclosed to the providers upon their request. Of note, when describing the method for secure data transmission, the PPM program will need to include information about how the PPM program will ensure adherence to the following NIST 800-53 security control families approved during Phase 2 of the PPM program's data security review for Elements 3B and 3C. Element 3B – Security Control Family: Access Control, Element 3B – Security Control Family: Identification and Authentication, Element 3C – Security Control Family: Media Protection, Element 3C – Security Control Family: System and Communications Protection, Element 3C – Security Control Family: System and Information Integrity.
	PPM Program Conformance as of Sept, 2013: Evidence of Actual Integrated Medicare Data in the PPM program under the QECP: The PPM program will be in a position to meet the element once it has established a process that applies privacy and security protections to the release of beneficiary identifiers and claims data to providers for the purposes of the requests for corrections/appeals process as described in the approach section above. The PPM program will likely need to contract with a vendor that has experience in the secure transmission of data as specified in the security requirement of the QECP to enhance the security protections it currently has in place.
Phase 4: Reporting	
	Includes provider correction and appeals, release of public reports and audit. Requirements are subject to change, but currently it is noted that QEs will be subject to ongoing program oversight. As part of this oversight, QEs will be

Standard/Element	Description of Element and Recommended Approach to Address Requirement
	required to submit an annual report covering program adherence (e.g., number of claims, market share, number of measures) and engagement of providers and suppliers (e.g., number of requests for corrections, time to respond to requests for correction). In terms of QECP expiration and renewal, QE status is valid for 3 years from the date of notification of CMS approval. The QE must submit data requests and fees to receive quarterly updates of Medicare data until the last 6 months of its qualification period. At that time, the entity must re-apply to QECP and undergo another review to continue receiving data. Throughout the QECP process, QEs are required to notify CMS prior to updating plans previously reviewed as part of the application process if these plans would change proposed measures, prototype reports, public reports, data sources, or data volume.

Feasibility of Implementing Performance Measures Given Data Issues Described in Phase I

The goal of the PPM is to build a robust database and use it to produce meaningful public reports on practitioners' performance. The PPM is a major project, estimated to take at least a year after MHCC selects a contractor to build the system. The selection of a contractor may not happen until a year from the development of the Request for Proposal (RFP) from these reports. The first phase of the Discern Team's work built on our assessment of possible measures the PPM can use and report on. Based on the data elements needed for those measures, the Discern Team assessed and continues to assess in Phase 2, the three sources of claims data that the PPM can bring together: the existing All-Payer Claims Database (APCD), Medicare data when MHCC becomes a Qualified Entity (QE), and Medicaid data.

Claims data reflect information submitted by providers to payers as part of the billing process. While not all medical care shows up in billing data, it does include useful information about diagnoses and services provided. Using claims data, for example, one can measure care processes such as "What percentage of patients with diabetes were given an HbA1c test at least once during the measurement year?" However, one cannot generally measure actual control/outcomes such as "What is a patient's HbA1c level?" unless special non-billing codes such as CPT II codes are utilized to represent this information. However, as discussed in the Phase 1 report, these codes are currently being utilized inconsistently.

While administrative claims data may have limitations for quality improvement, they can provide basic information for a very large segment of the Maryland health care delivery network. For accurate measurement and comparison across the state, large data sets are essential. Claims data provide the best source of data on costs, which are generally not available from providers themselves.

Use of clinical quality, resource, and patient experience measures would ensure the most comprehensive and credible information to assess physician or other clinician performance. When assessing physician or other clinician performance (including quality and cost of care) a number of methodological and other issues must be adequately addressed and are examined under the QECP as previously described, such as data sources, attribution, risk adjustment, and a process for addressing outliers. Additionally, it is important to understand the correlation between performance assessment based on measures of clinical quality, cost of care, and patient experience.

There are a significant number of core performance metrics that MHCC is presently considering for use in the PPM program. Appendix D contains a preliminary list. It makes sense to think about narrowing the list based on data availability and feasibility, and on relevance to and acceptance by the local community. For example are the measures under consideration relevant to local physicians, consumers and purchasers? Do the measures align with clinical areas where there is a focus on health improvement activities in the state?

The Discern Team offers recommendations in this section for a possible phased-in implementation of a robust PPM program which would report quality of care, resource and patient experience

metrics for both primary and specialty care over time. The suggested implementation timeline and grouping of measures by cycle are provided as examples to MHCC as a guide to facilitate further discussion.

Cycle 1- Initial Performance Metrics and Practitioners Measured

To combine Medicare fee for service (FFS) data with the existing APCD, and meet the 12-month reporting goal required of a QE, The Discern Team recommends initially reporting performance in cycle 1 based on a limited set of measures. The decision on which type(s) of physicians to measure in cycle 1 will likely be based on the type of measures available. For example, if most of the initially feasible and relevant measures evaluate aspects of care primarily provided by primary care providers, then primary care would most naturally be the first area for which to focus measurement. The decision on which measures to include may be based on the following criteria:

- How well measure focus areas align with health priorities in Maryland
- Feasibility based on the availability of data elements in the APCD, the measurement year, the number of years of data being utilized and the look-back period criteria for the measures. More specifically:
    - Outcome measures utilizing CPT II or G codes would not be feasible initially as they are not currently captured in the APCD.
    - Revenue codes and self-insured pharmacy data will be added to the APCD for the first time with 2013 data. If the PPM program will be using 2012 and 2013 data for cycle 1, a measure that requires pharmacy data or revenue codes may not be usable in cycle 1.
- The accuracy of the data that feeds the data elements in the measures
- Whether the measure(s) are considered 'standard' or 'alternative' under the QECP.
    - While certain 'alternative' measures may ultimately fit the needs of the PPM program better than certain 'standard' measures, they will require additional time and scrutiny on the part of the PPM program in an effort to receive QECP approval.
- How well the measures meet established requirements for statistical validity
- How well the measures perform in a medical group pre-test
    - This 'best practice' is implemented by many of the other practitioner performance measurement initiatives the Discern Team interviewed. Prior to adding new measures to reports, volunteer medical groups would be recruited to compare preliminary results on MHCC's secure portal to patient records. This validation ensures that measures are running as expected and are producing accurate and useful results. MHCC would provide the

volunteer medical groups with detailed instructions to ensure that a random selection of patient records is considered and all pertinent information is reviewed. Medical groups submit patient-level feedback through the secure portal, after which MHCC and their data contractor would review the results and make any needed adjustments to the measures or methods.

Cycle 2 – Add Additional Performance Metrics and Types of Practitioners to be Measured

Once the performance measurement system supports the primary reports based on what is initially meaningful and feasible, the intent is to enlarge the program with additional measures and ratings, with an eye toward a more comprehensive, robust program over time. As such, cycle 2 would include additional measures and additional types of practitioners to be measured.

More specifically, additional measures may become feasible with cycle 2 reporting because data elements have been included in the APCD for the required number of years to meet the look-back period criteria of measures. As more measures become available, more types of practitioners may also be evaluated. For example, while cycle 1 may focus on primary care, with the availability of new measures in cycle 2, certain specialties may be added such as cardiology and endocrinology, where there are a significant amount of measures. Also, if cost/efficiency/resource use was not focused on in cycle 1, then these types of measures may be considered for cycle 2.

Cycle 3 – Continue to Add Additional Performance Metrics and Type of Practitioners to be Measured

As additional measures are considered for cycle 3 (including quality, cost and even patient experience of care), additional specialties may be considered for cycle 3 such as rheumatology, pulmonology or others. Also, the PPM program may want to consider finding ways to evaluate clinical outcomes, either through capture of CPT II codes, or by another agreed upon method.

Lessons Learned

Our team has had an opportunity to talk with organizations who have been engaged in performance measurement / public reporting for several (7 - 10) years. The organizations included:

- Maine Health Management Coalition Foundation (MEHMC)
- Massachusetts Health Quality Partners (MHQP)
- Oregon Health Quality Corporation (Q-Corp)
- Wisconsin Collaborative for Healthcare Quality (WCHQ)
- Kaiser Permanente Mid-Atlantic States

In an attempt to more comprehensively assess the feasibility of implementing performance measures given data issues described in Phase 1, we can leverage the experience of other organizations who have already sought ways to combine similar clinical data sets. Some of these collaboratives collect and aggregate data from multiple data sources, including electronic and non-

electronic sources. Many have learned important lessons about effective methods and important issues, such as variability of capabilities at the practice-level. Given their experience, these efforts can play a valuable role in MHCC's efforts. Each site emphasized the importance of convening local stakeholders, including medical providers, at an early stage in an effort to establish local collaboration and buy-in. They also agreed that throughout the collaborative process, measure selection must be transparent and inclusive. Also, every effort must be made to achieve consensus so that the results are considered valid.

Lessons Learned/Advice:

- "Put meticulous effort into attribution as it's critical to physician buy-in"
- "Work hard on normalizing the data through risk adjustment"
- "Start with measures that aren't too controversial; e.g. HEDIS measures"
- "Don't expect you will be able to publicly report new measures right away; always plan for a trial period and if all goes well; then publicly report"
- "Report on what you can prove through validity and credibility of existing data"
- "Create your own provider directory; do not rely on health plan provider directories to attribute physicians to clinics/practices"
- "Crawl before you walk; don't be overly ambitious by starting with too many measures"
- "Continue monthly stakeholder meetings for the long-run"

Method to Disseminate Quality Metrics to Appropriate Practitioners and Collect Feedback

Data feedback to providers is a critical component of a successful physician-level performance measurement and reporting initiative and is required for QE Certification. Sharing of results with providers before they are reported allows physicians the opportunity to not only understand the process and identify where there may be inaccuracies, but to buy into the process as well. Because the ultimate goal of this initiative is to improve quality of care for patients, data feedback to providers is a principle driver for achieving this objective.

Through their past and current experience, the organizations the Discern Team spoke with are acutely aware of the need for this critical feedback loop. These organizations were kind enough to share their experiences with us regarding their physician feedback process in order for MHCC to explore and consider different methods of giving feedback to providers as well as the challenges and lessons learned with doing so.

Examples of methods for data feedback to providers include: individual physician interaction; sharing the findings through forums with the physicians and other stakeholders before release; and a compromise somewhere within the spectrum of possible methods. It is also important to emphasize that the community's membership (if applicable), infrastructure and governance of the organizations influence the selected method(s). As these organization's efforts around performance measurement reporting and provider feedback have evolved, so has their ability to share lessons learned and best practices in the areas of development, implementation, evaluation, physician engagement and provider outreach.

A compilation of these best practices include:

- One organization initiated a process to test (i.e. validate) the results achieved from calculating the measures on administrative data against what the provider may glean from their clinical record. Physicians participating in the validation process were asked to enter into a data sharing agreement. Once the agreement was signed, the physician was provided a list of their attributed patients to validate. The purpose of this was to validate the patient-to-provider attribution process and determine whether there was sufficient agreement between the attribution methodology used and the provider's record. Secondly, the physician was provided with indicators of whether each patient met the measurement criteria and they were asked to review their medical records for that patient and indicated agreement/disagreement with each indicator. For example, the physician report would read Patient X received breast cancer screening and the physician would be asked to agree or disagree based on the information they had in the patient's medical record. Through the validation process, the organization was able to demonstrate to their provider community the accuracy of utilizing administrative data for measurement, resulting in physicians feeling increasingly confident in the reporting results.

- Many organizations have worked with their state medical associations to establish buy-in for the project and to help seat their Expert Physician Panel, beginning the organization's process for data feedback to providers.

- One organization decided to establish the minimum patient threshold as the sample size for which 90 percent of physicians had at least 70 percent reliability. Therefore, they computed the observed 10^{th} percentile of estimated reliability for each sample size n, and identified the value of n for which the 10^{th} percentile of reliability was 7.70. This value of n was employed as the minimum patient threshold. Physicians receive three types of reports for each measure

    - Percentile rank compared to specialty peers, by measure

    - Performance score reported separately by measure

    - Performance score, stratified by payer

Reports were first distributed to Medical Directors of a sample of physician groups. Comments were solicited and a response to comments was provided within 2 business days. The second phase of report distribution went to 15,000 PPO physicians.

- All organizations currently have a process which informs the physician group contacts that the results will be posted timely and makes the group's results available to them on a secured website. The steps involve:
    - Create individual results data files for each group
    - Post data files on an interactive, password protected website
    - Send a cover letter via email explaining the public posting to each group, and notifying them that they can access their group's results on the website by using their group's password, which was provided via telephone.
- All organizations have developed a formal process for providers to file an appeal of clinical data and results. An example of MNCM's Appeals Policy is attached as Appendix E.
- One organization started many years ago assigning physicians to groups using payer databases. They found frequent disagreement among payers, and the provider groups felt all payer results were inaccurate. Therefore they changed to their current system that uses provider-defined groups. Updated at least annually through a provider available web portal, this method is reliable and well-accepted by patients and providers, is validated, engages groups actively, and helps relationships. Groups are asked to review and correct the following data elements: contact information, practices listed within their group, physicians and specialties within each practice, and responsible contact person in each group. In the future the organization intends to add data elements such as role of the physician, role of the contact person, and multiple contacts.

Lessons Learned/Advice:

- "Put meticulous effort into attribution as that's critical to physician buy-in"
- "Solicit Key Physician Champions"
- "Make the goal to report the most accurate data and to inspire the physicians/groups to make improvements. If you alienate the providers along the way, then you aren't achieving your purpose"
- "Continue monthly stakeholder meetings for the long-run. Don't stop these meetings with <initial> decisions and deliverables"

- Physicians have been very excited about a community-wide quality focus but have also shared concerns regarding true quality measurements and misinterpreted measure rates. Some of their issues and concerns:

    - Coding Issues – patients who are pulled into denominators based on incorrect diagnosis coding from billing systems.

    - Non-compliant Patients – physicians feel that if they order a test, drug or procedure that they are "doing the right thing": but cannot control patients who do not follow through with the orders. Health Savings Accounts, Payers, and Employers Benefit Packages may place restrictions on what providers can order and determine patients' out of pocket costs, which may affect patient compliance.

    - "Sicker patients" – patient's age, co-morbidities and health status is not taken into consideration and affects the appearance of the physicians' scores.

    - Level of Effort – provider time, staff time to actively participate, review, and correct quality reports have been a concern.

Options for Providing Access to Data:

There are primarily three methods for providing physicians with access to their data:

1. Electronically via a secure web portal.
2. Individual reports mailed directly to the physician either through the U. S. Mail or electronically.
3. Through in person meetings, either in groups or individually.

There are benefits and drawbacks to each of these methods. Some of these are obvious. A few bear mentioning at this stage. Producing a secure web portal would be the most expensive option initially. The system would need to be designed and built. Access to the system would need to be controlled. A method would have to be developed to identify and verify end users in the community. Infrastructure would need to be created to maintain the system, train community users and provide ongoing support to community users experiencing technical difficulties.

The benefits of using a secure web portal are that physicians can access the system at their convenience. The process of verifying their data can be accomplished in two steps rather than one single step. The two steps are attribution of the physician to the clinic and attribution of the patient to the physician. Using a web portal, physicians can view which clinics they are attributed to early in the process. Attribution of the physician to the clinic can be accomplished prior to the analysis of the claims data. Physicians can then view the panel of patients attributed to them following the claims analysis. . Several organizations use some form of a secure portal to exchange performance metrics.

The second method involves producing individualized physician or clinic reports and then distributing them to the recipients. If errors are detected by the physicians, a mechanism must exist to report and correct the errors. This will require an iterative process. Once an error is reported, it will need to be corrected in the system. A new report will then need to be sent to the physician for verification that the error is corrected. This method requires a smaller initial investment than setting up a secure portal. CMS considers the US Mail a secure method of transport. Additional security measures do not need to be implemented. This method requires more intensive human resources to produce and mail the reports. It also requires manual entry of corrections on the part of staff.

A third option is distribution of information through in person meetings. This can be accomplished through either group or individual meetings. Some Medicaid agencies employ Primary Care Case Management (PCCM) networks to care for their population of patients. A few of these have a team that pays regular visits to each physician in the network. Members of this team provide a variety of services; resolution of payment issues, notification of policy changes and transfer of best practices. They also share performance metrics and resolve any issues with attribution or accuracy. This is the most labor intensive. Hard copies of each physician's reports need to be produced. This is a "high touch" method that ensures physicians have a chance to ask questions and understand the process. It is more likely to create as much satisfaction as possible with the program.

A variation of this method is to hold regional physician meetings to distribute reports. This is also a "high touch" method that will allow physician concerns to be heard and will allow a dialogue about the program. It is still labor intensive. It will also require the infrastructure to receive comments on errors and make corrections.

Recommendations:

1. Build a secure, password protected portal to disseminate provider reports and receive feedback prior to public reporting.

2. Adopt a formal policy for Appeal of Clinical Data and Appeals and associated procedures such as a review process timeline (See appendix E for sample policy and procedures)

Assessment of Cost/Efficiency Performance Measures

Evaluate Existing Measures, Identify Alternative Measures, Evaluate Acceptability to CMS

Through earlier work with MHCC, the Discern Team completed an environmental scan of cost/efficiency/resource use measures appropriate for physician evaluation. As with evaluation of quality measures, the Discern Team began its search by compiling those measures that may be considered 'standard' under the QECP (i.e., that are either NQF endorsed or used by a CMS program). Not surprisingly, the number of standard measures for cost/efficiency/resource use was significantly less than for quality measures. Given the dearth of these types of standard measures, the Discern Team also compiled cost measures utilized by other practitioner performance

measurement programs. The feasibility of all measures was assessed based on the availability of data elements in the APCD.

The result of this analysis is presented below, which contains a list of applicable cost measures, grouped by feasibility based on APCD available data. Group 1, as indicated in Table 2, contains two standard measures that are NQF endorsed and look to be feasible with the addition of revenue codes to APCD data. The steward for these measures is Optum. While some of the information can be viewed free of charge, there are fees associated with licensing ETG information.

Table 2: Standard Cost Measures for Use with Revenue Codes

NQF	Measure Title	Description	Steward	Provider Type
Group 1: Standard Cost Measures for Use with Revenue Codes				
1609	ETG Based HIP/KNEE replacement cost of care measure	The measure focuses on resources used to deliver episodes of care for patients who have undergone a Hip/Knee Replacement.	Optum	Orthopedic
1611	ETG Based PNEUMONIA cost of care measure	The measure focuses on resources used to deliver episodes of care for patients with Pneumonia.	Optum	Primary Care, Pulmonology

Group 1 also contains several QECP 'alternative' measures (i.e., they are not NQF endorsed or used in a CMS program) as indicated in Table 3. However, three of these measures are currently being used by the Oregon Health Care Quality Corporation, which has already received QE certification. As such, these measures will undergo evaluation in Oregon's QECP Phase 3 review, and if approved for use, may not receive as much scrutiny when submitted by the PPM program as freshly proposed 'alternative' measures. The 'Hospital Admissions for Ambulatory-Sensitive Conditions, Rate per 100 patients' measure is based on the AHRQ measure and uses the following Prevention Quality Indicators (PQIs):1, 3, 5, 7, 8, 10-16.

A version of the first two measures in the group below, ER visits/1000 patients, and Hospital Days/1000 patients, is currently being implemented by MHCC's Multi-Payer Patient Centered Medical Home Pilot Project (MMPP). Discern, working with MHCC and their data contractor, SSS, produces these measures annually, attributing to the 52 practices in the project. The IHA specifications include revenue codes and risk scores, which are assigned using DxCG relative risk software.

Table 3: Alternative Cost Measures for Use

NQF	Measure Title	Description	Steward	Provider Type
Group 1: Alternative Cost Measures for Use				
N/A*	Emergency Department Visits per thousand member years	Risk and reliability adjusted ED visits per thousand member years (PTMY)	IHA	Primary Care
N/A*	Hospital Days per thousand patients			Primary Care
N/A	Potentially Avoidable ED Visits, % of Total	This measure assesses the percentage of total ED visits with a primary diagnosis code that appears on California MediCal's list of Avoidable ICD-9 Diagnosis Codes for ED Care	Oregon Health Care Quality Corporation	Primary Care
N/A	Potentially Avoidable ED Visits, Rate per 100 patients	This measure assesses the total number of emergency department visits with a primary diagnosis code that appears on California MediCal's list of Avoidable ICD-9 Diagnosis codes for ED Care among the eligible population, expressed as a rate per 100 patients.	Oregon Health Care Quality Corporation	Primary Care
N/A	Hospital Admissions for Ambulatory-Sensitive Conditions, Rate per 100 patients	All eligible discharges with ICD-9-CM principal diagnosis code for any of the conditions listed in the Acute/Chronic Composite measure, expressed as a rate per 100 patients.	Oregon Health Care Quality Corporation	Primary Care

*Version of measure used by PCMH pilot

Group 2, as indicated in Table 4, contains measures that would generally be feasible with the use of pharmacy data. The measures listed are all being implemented by the Integrated Healthcare Association's (IHA) annual P4P measurement for California medical groups. A version of the total cost of care measure is also being implemented by MMPP.

IHA's specification of the generic prescribing measures requires NDC codes and a flag if a drug is generic or brand priced as generic. The specifications allow plan-defined definitions of 'brand' and generic' used to calculate the measure, based upon how the prescription was paid and will accommodate plan-specific contracting arrangements that price brand-name drugs at generic rates. The APCD has NDC codes, and has a GBO (Generic/Brand indicator). However, there doesn't seem to be a notation that indicates brand priced as generic, and the APCD does not specify if those would be included with generic. Further investigation is needed to understand whether this information would be available for measure calculation.

Table 4: Alternative Cost Measures for Use with Pharmacy Data

NQF	Measure Title	Description	Steward	Provider Type
Group 2: Alternative Cost Measures for Use with Pharmacy Data				
N/A*	Total Cost of Care	Measures actual payments associated with care for all commercial HMO/POS enrolless in a PO, including all covered professional, pharmacy, hospital and ancillary care, as well as administrative payments and adjustments.	IHA	Primary Care
N/A	Generic Prescribing: SSRIs/SNRIs	The generic prescription rate for the given therapeutic class	IHA	Primary Care, Psychiatry
N/A	Generic Prescribing: Statins	The generic prescription rate for the given therapeutic class	IHA	Primary Care, Cardiology, Endocrinology
N/A	Generic Prescribing: Diabetes – Oral	The generic prescription rate for the given therapeutic class	IHA	Primary Care, Endocrinology
N/A	Generic Prescribing: Anti-Ulcer Agents	The generic prescription rate for the given therapeutic class	IHA	Primary Care, Gastroenterology
N/A	Generic Prescribing: Cardiac – Hypertension and Cardiovascular	The generic prescription rate for the given therapeutic class	IHA	Primary Care, Cardiology
N/A	Generic Prescribing: NASAL Steroids	The generic prescription rate for the given therapeutic class	IHA	Primary Care, Allergy, ENT
N/A	Generic Prescribing: NSAIDS	The generic prescription rate for the given therapeutic class	IHA	Primary Care, Multiple
*Version of measure used by PCMH pilot				

NCQA Relative Resource Use Measures

With respect to cost/efficiency measures, NCQA has developed a suite of Relative Resource Use measures, which indicate how intensively health plans use physician visits, hospital stays and other resources to care for members identified as having one of five chronic diseases; cardiovascular disease, COPD, diabetes, hypertension and asthma. When evaluated alongside respective quality measures, RRU measures make it possible to consider quality and spending simultaneously. The Discern Team's understanding is that these measures were created to evaluate health plan performance and have not been deemed appropriate for use to evaluate practitioners.

Feasibility of Development Based on Cost, Ease of Creation & Meaningfulness to Patients and Practitioners

Based upon the Discern Team's assessment of available cost measures, we would not recommend developing cost measures from the ground up, at least not at the outset of the PPM program. The development of important, scientifically sound, feasible and useful performance measures can take a year to two years at minimum to produce. In addition, cost measures have generally been on the more difficult end of the spectrum in terms of ease of development. Given there are a number of available cost measures that may work to suit the needs of the PPM program, the Discern Team would recommend starting there.

There are still costs associated with implementing existing cost measures, but they mainly relate to programming and testing measures and potentially purchasing proprietary ETG or DXcG software. The feasibility of implementing measures will be based upon having the right data elements in the APCD, including revenue codes and pharmacy data, in addition to others as described previously (brand priced as generic, etc.) In addition, it will take effort to make these measures meaningful and actionable for patients and practitioners. This will be discussed further in Phase 4 of the PPM program planning process, which lays out requirements for determining consumer usability. There will also be additional effort required to have 'alternative' measures approved under the QECP.

Recommendations for the PPM Development Implementation Timeline

The state of Maryland is interested in implementing the PPM program in an expedient manner, in order to support both the Community Integrated Medical Home (CIMH) and provide information on practitioner quality in addition to the quality information already produced on hospitals. In addition, as mentioned, the timeline requirements for the PPM program through the QECP process is for public reporting to occur 12 months from receiving certification (i.e., after the Phase 1 (application) is approved).

The table below takes into account those imperatives, and also takes into consideration all of the components that need to be complete in order to produce accurate meaningful information for consumers and practitioners.

Table 5: PPM Implementation Sequence

PPM Implementation Sequence		
MHCC receives funding from Implementation Grant		
	Submit QE application	
		Obtain QECP phase 1 approval
		1A Contractual relationships in place with vendors or member organizations needed to meet standards
		1A Specify commitment timeline for QECP process
		1B Identify geographic region for which PPM program is requesting Medicare data

PPM Implementation Sequence
1C Identify providers or suppliers for which PPM program will produce reports with Medicare data
1D Show ability to cover costs of performing the function of a QE
2A Obtain claims data from at least one other payer source to combine with Medicare Parts A and B claims data, and Part D drug event data
Self-assessment of meeting the remaining standards and elements (3, 2B, 4-8)
Obtain QECP phase 2 approval
3A (Administrative): Show ability to comply with Federal data security and privacy requirements, and document a process to follow those protocols
3B (Technical): Identify system users and prequalification process for access to data
3C (Physical): Identify processes and systems in place to protect the IT physical infrastructure
QE and research DUAs completed
Data payment made
Obtain QECP phase 3 approval
2B Accurately combine Medicare claims data with claims data from other payer sources
Evidence of previous experience
Evidence of actually integrating Medicare data under QECP
Provider identifier issues worked out
Patient identifier issues worked out
4A Follow measure specifications
Decide on list of standard and alternative measures, based upon feasibility given data and importance related to Maryland priorities
Retrieve most up-to-date specifications from stewards
Evaluate accuracy of data elements in measures based upon Maryland data
Decide on any program-specific algorithm logic
Program measures, calculate results
4B Use a defined and transparent method for attribution of patients and episodes
Evidence of previous experience
Evidence of actually integrating Medicare data under QECP
Solidify minimum validity requirements for reporting (e.g., predetermined sample/denominator size, confidence interval, or reliability score)

PPM Implementation Sequence
Produce results of the actual testing for each measure.
Disseminate key validity methodology descriptions to providers and the public.
4D Set and follow requirements to establish statistical validity of measure results for efficiency, effectiveness, and resource use measures
Evidence of previous experience
Evidence of actually integrating Medicare data under QECP
Solidify minimum validity requirements for reporting (e.g., predetermined sample/denominator size plus confidence interval or reliability score)
Produce results of the actual testing for each measure.
Disseminate key validity methodology descriptions to providers and the public.
Describe the standard payment methodology implemented for applicable measures included in the PPM program performance reports, if applicable.
4E Use appropriate methods to employ risk adjustment
Evidence of previous experience
Evidence of actually integrating Medicare data under QECP
Determine rationale for using or not using a risk adjustment methodology for each measure in the PPM program
Apply the methodology to applicable measures and justified no risk adjustment for ones where it was determined not necessary
Disseminate key risk adjustment methodology descriptions to providers and the public.
4F Use appropriate methods to handle outliers
Evidence of previous experience
Evidence of actually integrating Medicare data under QECP
Determine rationale for handling outliers for each measure in the PPM program
Apply the methodology (how identified and how accounted for) to applicable measures and justify no outlier handling for ones where it was determined not necessary
Disseminate key outlier methodology descriptions to providers and the public.
4G Use comparison (peer) groups when evaluating providers or suppliers compared to each other
Evidence of previous experience

PPM Implementation Sequence		
	Evidence of actually integrating Medicare data under QECP	
		Solidify methods for and define peer groups for providers within the PPM program under the QECP
		Disseminate key peer groups methodology descriptions to providers and the public.
	4H Use benchmarks when evaluating providers	
	Evidence of previous experience	
	Evidence of actually integrating Medicare data under QECP	
		Solidify methods for selecting benchmarks including how the benchmark is identified, the type of benchmark and any relevant geographic parameters
		Disseminate key benchmarks methodology descriptions to providers and the public
	5A Use standard measures	
	Evidence of actually integrating Medicare data under QECP	
		Decide on which standards measures will be used within the PPM
		Document for standard measures being used, the NQF-endorsed measure number or CMS measure name or number, the name of measure, name of steward/owner and measure description
		Document type of provider to which each measure was applied, the rationale for selecting each measure, the relationship of each measure to existing measurement efforts, and relevance of each measure to the population in each geographic area
	5B Use approved alternative measures	
	Evidence of actually integrating Medicare data under QECP	
		Decide on which alternative measures will be used within the PPM
		Document the name of measure, name of steward/owner and measure description
		Document the type of provider to which each measure was applied, the relationship of each measure to existing measurement efforts, and relevance of each measure to the population in the covered geographic area.
		Produce evidence that the measures are more valid, reliable, responsive to consumer preferences, cost effective or relevant to dimensions of quality and resource use not addressed by a standard measure

PPM Implementation Sequence
The date, time, location/dial-in, attendee list, and QECP alternative measure discussion summary for PPM program relevant meetings and approval or sign-off of relevant alternative PPM program measure meeting minutes from committee or committee chairs
Process to monitor and evaluate if new scientific evidence is released or a related standard measure is endorsed
Evidence to support planned frequency of research, names and titles of staff responsible for research, and the sources to be referenced when researching whether alternative measures become standard.
If new evidence or a standard measure is available, the PPM program must start using the new standard measure within 6 months or the QE can request, with supporting scientific documentation, approval to continue using the alternative measure.
6A Systematically evaluate accuracy of the measurement process and correct errors
Evidence of previous experience
Evidence of actually integrating Medicare data under QECP
Solidify processes for internal verification, audit process, or software used to evaluate the accuracy of calculating performance measures from claims data
Identify PPM staff responsible for verifying measurement process, develop process for correcting errors in measurement and reporting processes and updating reports to providers and consumers, generate reports from the validation process
If using an external vendor, the PPM program has documentation of agreement and/or purchase order of the software and/or systems vendor utilized in the PPM program's validation process.
7A Design reporting for providers, suppliers, and the public
Evidence of actually integrating Medicare data under QECP
Submit confidential provider reports and public reports that include, performance results/ratings, level of reporting, explanation of rating approaches, indication of whether each contain Medicare data, description of measures, and disputes

PPM Implementation Sequence
Submit evidence to support that provider and public report dissemination plans include: info on how to locate reports, date of release and frequency of subsequent releases (at least annually), method of distribution, target audiences, source of contact
7B Improve reporting
Evidence of previous experience
8A Use corrections process
Evidence of previous experience
Evidence that demonstrates that the PPM program's corrections process has been in place for generally 3 years prior to application.
Evidence that it has established a process to allow providers to view reports (at least 60 days prior to public release) confidentially, request data, and ask for correction of errors before the reports are made public
Description of how provider reports (without beneficiary PHI) will be transmitted to providers, the timeline to complete the corrections process prior to releasing public reports, & how providers can request corrections prior to reporting
8B Use secure transmission of beneficiary data
Evidence of actually integrating Medicare data under QECP
Establish a process that applies privacy and security protections to the release of beneficiary identifiers and claims data to providers for the purposes of the requests for corrections/appeals process
Description of how beneficiaries' PHI will be transmitted to providers in the event of a request for correction, the name of org responsible for transmitting PHI, and a process that ensures only the min necessary identifiers and claims data are disclosed
Include information about how the PPM program will ensure adherence to NIST 800-53 security control families approved during Phase 2 of the PPM program's data security review for Elements 3B and 3C
Obtain QECP Phase 4 approval
Initiation of provider corrections and appeals process (required 60 days before public report)
First public report released

PPM Implementation Sequence	
	Ongoing program admin, annual program reports, audit, public reports released at least annually, notification to CMS prior to updating proposed measures, prototype reports, public reports, data sources, data volume

The actual timeline associated with the PPM implementation sequence is dependent on several variables. The most important is funding. The anticipated source of funding is the SIM grant from the Center for Medicare and Medicaid Innovations. This funding will not likely be available until July 2014. However, much can be accomplished prior to the receipt of the SIM grant.

Much of what is included in Table 5 under "Obtain QECP phase 1 and 2 approval" can be completed over the next year. Most regions that are attempting to obtain QE status are doing so through a non-profit or through a coalition of organizations. Maryland is unique in that the MHCC, a branch of government, will be submitting the application. Many of the requirements have been met through MHCC or its contractors. Through Social Scientific Systems (SSS), MHCC already has claims data from several payer sources that can be combined with Medicare data. They already have stringent security requirements to protect the data. Through the PCMH program, there are already contractual relationships in place with providers and payers. The geographic region for which the PPM program will request Medicare data will be the state of Maryland. There are also items within later steps that can be completed ahead of time or at least where good progress can be made through vetting with stakeholders, such as the choice of the initial measures, the choice of risk methodology, handling of outliers, comparison with peer groups and the use of benchmarks.

One place where several months of time can be saved is in the creation of an approved security system. While MHCC already has experience with the data security required as a result of other programs, this will need to be revisited for the PPM program. The contractor that is chosen for the PPM program will need to meet physical and IT requirements to receive and analyze the data. This process can take several months if the contractor establishes the necessary safeguards after receiving the contract. However, the RFP can stipulate that the contractor already have the necessary measures in place. Federal contractors that handle CMS data already have to meet strict guidelines for security. Because CMS is located in Baltimore, there are many companies in Maryland that already have been approved by CMS to handle patient level data and will be capable to doing the analysis necessary for the PMM program. The time required for obtaining security approval can be eliminated if it is stipulated in the RFP that the contractor will already need this approval from CMS.

CMMI requires that data be made public within a year of the QE certification being awarded. The initial data can be quite limited. One QE is only planning on releasing a couple of measures on diabetes. This timeline can be accomplished within one year. The ultimate timing of the project will depend on decisions made by MHCC, the stakeholders involved and the availability of resources prior to the award of the SIM grant.

Phase 4: Technology Solutions for Public Reporting of Practitioner Performance Measures

Introduction

This phase will plan for the actual operation and products of the practitioner performance measurement system. The Project Team will recommend solutions, and build them into RFP specifications in Phase 5. The steps in this Phase also contribute to MHCC's obtaining approval from CMS to use Medicare data in public reporting as discussed in Phase 2.

Reporting Requirements under QE and State Law

Minimum Reporting Schedule (Frequency for which the performance measures should be reevaluated/recalculated/updated)

QECP

As mentioned, the goal of the QECP in terms of timeframe is for QEs to publicly report performance information on providers 12 months from when they pass their phase 1 QECP review and receive QE certification. The Discern Team understands there is flexibility in this 12 month timeline, and that the QECP program is willing to work with applicants, but the degree of flexibility in the timeline is unknown. As such it is important that PPM program planning requirements are built around a reasonable timeframe and the vendor chosen for building the program has the experience and ability to aggregate data and deliver reports quickly and accurately.

QECP element 7A which relates to designing reporting for providers and the public requires that provider and public report dissemination plans include the date of the initial reports' release and the frequency of subsequent releases, which need to occur *at least annually*.

QEs will be subject to ongoing program oversight. As part of this oversight, QEs will be required to submit an annual report covering program adherence (e.g., number of claims, market share, number of measures) and engagement of providers and suppliers (e.g., number of requests for corrections, time to respond to requests for correction). In terms of QECP expiration and renewal, QE status is valid for 3 years from the date of notification of CMS approval. The QE must submit data requests and fees to receive quarterly updates of Medicare data until the last 6 months of its qualification period. At that time, the entity must re-apply to QECP and undergo another review to continue receiving data. Throughout the QECP process, QEs are required to notify CMS prior to updating plans previously reviewed as part of the application process if these plans would change proposed measures, prototype reports, public reports, data sources, or data volume.

With respect to measures used, the PPM program must have a process to monitor and evaluate if new scientific evidence is released or a change in the status of a standard or alternative measure has occurred. For example, a 'standard' measure may lose NQF endorsement or a measure related to an 'alternative' measure may become NQF endorsed. The QECP requires that if new evidence or a

standard measure is available (as related to an alternative measure), the PPM program must start using the new standard measure within 6 months or the QE can request, with supporting scientific documentation, approval to continue using the alternative measure. As such, the PPM program must provide evidence to support planned frequency of research in this regard. In addition, the PPM program will need to verify the most current detailed specifications from the measure steward(s) each year and have a process in place to vet any changes with the PPM program, prior to making programming logic changes and calculation of results.

State Law

Under COMAR 10.25.06.04 Maryland state law requires that on or before June 30 of each year, a designated payer submits to MHCC a complete set of the payer's previous calendar year's data. The annual submission consists of all claims for services provided in the previous calendar year that are adjudicated between Jan 1 of the previous calendar year, through April 30th of the year the submission is due. However, the data is generally not clean and audited until nine months later. COMAR 10.25.06.14 also allows a payer to request an extension of time for up to 60 days after the due date of June 30. Further investigation is needed to understand how often this extension is requested by payers and granted by MHCC. In MHCC's draft work plan to expand the APCD, reporting requirements will change to a more frequent schedule; from annual, to semi-annual to quarterly.

CMS releases data quarterly. If MHCC were able to adopt a semi-annual or quarterly reporting process, MHCC would be able to combine APCD data with Medicare data on a more frequent basis.

Recommended Approach

Generally most performance measurement programs produce public results on an annual basis, which aligns with the requirement under the QECP. Certain measurement programs produce internal physician reports semi-annually. Medicare data are available quarterly, which would allow rolling updates of 12 months of data. Medicaid data should be available annually, but this is still under investigation. At least initially, it appears that reporting annually is as frequent as possible.

With respect to reevaluating measures contained within the program, it makes sense to have consistency of measures over time for tracking and trending performance purposes, unless there is a change in the scientific evidence which would make the measure no longer relevant. The PPM program will also need to make sure that the specifications being utilized each year are the most up-to-date version (i.e., any change in codes, etc. is represented). This information would need to be requested from each measure steward.

Audit Requirements

The complicated combination of data sources, and the new measures for the measurement system, will require expanded audits and quality assurance to ensure accuracy.

QECP

As discussed in the PPM Planning Phase 2 report, standard 6 of the QECP program covers the QE Verification Process, which requires the PPM program to evaluate the accuracy of the measurement process and correct errors. As such, the PPM program must provide evidence to demonstrate the internal verification, audit process, or software used to evaluate the accuracy of calculating performance measures from claims data, in addition to the name, credentials, and title of staff responsible for verifying the measurement process, the process for correcting errors in measurement and reporting process, the process for updating reports to providers and consumers, and reports generated by the validation process. The PPM program must also document at least 3 years previous experience in evaluating the accuracy of the measurement process and correcting errors covering all relevant areas. Experience from any PPM program contractor is also relevant to meeting this element. As such, the PPM program should choose a vendor to work with that has at least 3 years' experience with internal verification, audit process and/or software used to evaluate the accuracy of calculating performance measures from claims data.

State Law

Current audit and acceptance processes do not appear to be specified in the Maryland regulations. However, the Discern Team understands that requirements related to audit and acceptance processes in relation to acceptance of data into the APCD do exist. For example payers must meet reporting thresholds unless they obtain waivers, and all payers receive waivers for some variables. MHCC staff prepare a workbook for SSS which lists the variables for which each payer received a waiver. A recent requirement was initiated which requires submitters to compare values generated from prior year submissions with the values from the data they are about to submit. If there is more than a 10% difference in the values, the carrier has to explain the reason.

Recommended Approach

Quality assurance will be needed to ensure accuracy on at least two levels; on the front end related to data quality checks for data coming into the APCD and on the back end with regard to measure calculation. The Discern Team recommends the PPM program contract with a vendor that is well experienced with meeting the specific audit requirements as outlined. Most of the performance measurement programs the Discern Team spoke with utilize vendors to execute the validation requirements.

Security Requirements

MHCC will need to meet the state's requirements for security and the more stringent requirements for a QE data use agreement (DUA) to receive the Medicare data.

QECP

QECP requirements mandate that the PPM program must demonstrate it has rigorous security and privacy practices in place to protect the data released to it and has programs in place to enforce and monitor data security practices. The PPM program must meet QECP Phase 2 Data Security approval before it is able to receive the Medicare data for aggregation into the APCD. In addition, stringent security and privacy standards are enforced throughout all phases of the QECP program, including data receipt or transmission, performance measure calculation, the provider review and

corrections process, and performance reporting (including all public reporting as well as any other types of more limited reporting). QE's are required to submit any disclosures of beneficiary identifiable information from the past 10 years (or lifetime of the entity if less than 10 years), though this disclosure will not automatically disqualify an entity from participating in the program.

QECP Phase 2, including elements 3A (Administrative), 3B (Technical) and 3C (Physical), in addition to QECP Phase 3, element 8A cover the security requirements for the program. In general, the intent of the data security requirements in the QECP program is to ensure the PPM program provides evidence of rigorous data privacy and security policies including enforcement mechanisms.

Element 3A (Administrative): Show ability to comply with Federal data security and privacy requirements, and document a process to follow those protocols

Assessment: The PPM program has established systems and protocols to address the following security elements (as detailed in FIPS 200):

- Audit and Accountability
- Certification, Accreditation, and Security Assessments
- Incident Response, including notifying CMS and beneficiaries of inappropriate data access, violations of applicable Federal and state privacy and security laws and regulations for the preceding 10-year period (or, if the PPM program has not been in existence for 10 years, then for the lifetime of the organization.)

Evidence:
1. Current NIST Certification and Accreditation for compliance with FIPS 200 and SP 800-53 at the moderate impact level. If the PPM program has not undergone this Certification and Accreditation process, it must produce documentation of the systems and protocols that meet this same threshold with respect to the security factors listed in Element 3A, which are further described below. If these systems and protocols do not meet the standards of FIPS 200 and SP 800-53 or have not yet been fully implemented, the PPM program may be granted an opportunity to submit an agreed-upon plan of action and milestones (POA&M) and subsequently must demonstrate appropriate improvements to meet compliance.

Audit and Accountability: The PPM program must: (i) create, protect, and retain information system audit records to the extent needed to enable the monitoring, analysis, investigation, and reporting of unlawful, unauthorized, or inappropriate information system activity; and (ii) ensure that the actions of individual information system users may be uniquely traced to those users so they can be held accountable for their actions.

Certification, Accreditation, and Security Assessments: The PPM program must (i) periodically assess the security controls in organizational information systems to determine if the controls are effective in their application; (ii) develop and implement plans of action designed to correct deficiencies and reduce or eliminate vulnerabilities in organizational information systems; (iii) authorize the operation of organizational information systems and any associated information system connections; and (iv) monitor information system security controls on an ongoing basis to ensure the continued effectiveness of the controls.

Incident Response: The PPM program must (i) establish an operational incident handling capability for organizational information systems that includes adequate preparation, detection, analysis, containment, recovery, and user response activities; and (ii) track, document, and

report incidents to organizational officials and/or authorities.

Planning: The PPM program must develop, document, periodically update, and implement security plans for organizational information systems that describe the security controls in place or planned for the information systems and the rules of behavior for individuals accessing the information systems.

Risk Assessment: The PPM program must periodically assess the risk to organizational operations (including mission, functions, image, or reputation), organizational assets, and individuals, resulting from the operation of organizational information systems and the associated processing, storage, or transmission of organizational information.

Compliance with applicable state laws regarding privacy and security: The PPM program, regardless of Certification and Accreditation status, must document compliance with applicable state laws regarding privacy and security.

2. The PPM program, regardless of Certification and Accreditation status, must document all breaches of data security or privacy within the past 10 years (or the lifetime of the organization if that is less than 10 years).

3. The PPM program, regardless of Certification and Accreditation status, must document the protocols and systems that will be implemented for transferring information to providers and suppliers as part of the requests for corrections/appeals process.

Evidence of experience submitted by the PPM program may be the demonstrated experience of the applicant, of the applicant's contractor, or, if the applicant is a collaborative, of any member organization of the collaborative.

Element 3B (Technical): Identify system users and prequalification process for access to data

Assessment: The PPM program has established systems and protocols to address the following security elements (as detailed in FIPS 200):

- Access Control
- Awareness and Training
- Configuration Management
- Identification and Authentication
- Personnel Security

Evidence: Current NIST Certification and Accreditation for compliance with FIPS 200 and SP 800-53 at the moderate impact level. If the PPM program has not undergone this Certification and Accreditation process, it must produce documentation of the systems and protocols in place with respect to the security factors listed in Element 3B, and further described below. If these systems and protocols do not meet the standards of FIPS 200 and SP 800-53 or have not yet been fully implemented, the PPM program may be granted an opportunity to submit an agreed upon plan of action and milestones (POA&M) and subsequently demonstrate appropriate improvements to meet compliance.

Access Control: The PPM program must limit information system access to authorized users, processes acting on behalf of authorized users, or devices (including other information systems) and to the types of transactions and functions that authorized users are permitted to exercise.

Awareness and Training: The PPM program must: (i) ensure that managers and users of organizational information systems are made aware of the security risks associated with their activities and of the applicable laws, Executive Orders, directives, policies, standards, instructions, regulations, or procedures related to the security of organizational information systems; and (ii) ensure that organizational personnel are adequately trained to carry out their assigned information security-related duties and responsibilities.

Configuration Management: The PPM program must: (i) establish and maintain baseline configurations and inventories of organizational information systems (including hardware, software, firmware, and documentation) throughout the respective system development life cycles; and (ii) establish and enforce security configuration settings for information technology products employed in organizational information systems.

Identification and Authentication: The PPM program must identify information system users, processes acting on behalf of users, or devices and authenticate (or verify) the identities of those users, processes, or devices, as a prerequisite to allowing access to organizational information systems.

Personnel Security: The PPM program must: (i) ensure that individuals occupying positions of responsibility within organizations (including third-party service providers of services) are trustworthy and meet established security criteria for those positions; (ii) ensure that organizational information and information systems are protected during and after personnel actions such as terminations and transfers; and (iii) employ formal sanctions for personnel failing to comply with organizational security policies and procedures.

Evidence of experience submitted by the PPM program may be the demonstrated experience of the applicant, of the applicant's contractor, or, if the applicant is a collaborative, of any member organization of the collaborative.

Element 3C (Physical): Identify processes and systems in place to protect the IT physical infrastructure

Assessment: The PPM program has established systems and protocols to address the following security elements (as detailed in FIPS 200):

- Contingency Planning
- Maintenance
- Media Protection
- Physical and Environmental Protection
- System and Services Acquisition
- System and Communications Protection
- System and Information Integrity

Evidence: Current NIST Certification and Accreditation for compliance with FIPS 200 and SP 800-53 at the moderate impact level. If the PPM program as not undergone this Certification and Accreditation process, it must produce documentation of the systems and protocols in place with respect to the security factors listed in Element 3C, and described further below. If these systems and protocols do not meet the standards of FIPS 200 and SP 800-53 or have not yet been fully implemented, the PPM program may be granted an opportunity to submit an agreed upon plan of

action and milestones (POA&M) and subsequently demonstrate appropriate improvements to meet compliance.

Contingency Planning: The PPM program must establish, maintain, and effectively implement plans for emergency response, backup operations, and post-disaster recovery for organizational information systems to ensure the availability of critical information resources and continuity of operations in emergency situations.

Maintenance: The PPM program must: (i) perform periodic and timely maintenance on organizational information systems; and (ii) provide effective controls on the tools, techniques, mechanisms, and personnel used to conduct information system maintenance.

Media Protection: The PPM program must: (i) protect information system media, both paper and digital; (ii) limit access to information on information system media to authorized users; and (iii) sanitize or destroy information system media before disposal or release for reuse.
Physical and Environmental Protection: The PPM program must: (i) limit physical access to information systems, equipment, and the respective operating environments to authorized individuals; (ii) protect the physical plant and support infrastructure for information systems; (iii) provide supporting utilities for information systems; (iv) protect information systems against environmental hazards; and (v) provide environmental controls in facilities containing information systems.

System and Services Acquisition: The PPM program must: (i) allocate sufficient resources to adequately protect organizational information systems; (ii) employ system development life cycle processes that incorporate information security considerations; (iii) employ software usage and installation restrictions; and (iv) ensure that third-party providers employ adequate security measures to protect information, applications, and/or services outsourced from the organization.

System and Communications Protection: The PPM program must: (i) monitor, control, and protect organizational communications (i.e., information transmitted or received by organizational information systems) at the external boundaries and key internal boundaries of the information systems; and (ii) employ architectural designs, software development techniques, and systems engineering principles that promote effective information security within organizational information systems.

System and Information Integrity: The PPM program must: (i) identify, report, and correct information and information system flaws in a timely manner; (ii) provide protection from malicious code at locations within organizational information systems; and (iii) monitor information system security alerts and advisories and take actions in response.

Evidence of experience submitted by the PPM program may be the demonstrated experience of the applicant, of the applicant's contractor, or, if the applicant is a collaborative, of any member organization of the collaborative.

Element 8B: Use secure transmission of beneficiary data

Assessment: The PPM program has established a process that applies privacy and security protections to the release of beneficiary identifiers and claims data to providers or suppliers for the purposes of the requests for corrections/appeals process.

Evidence: Description of process ensuring that only the minimum necessary beneficiary identifiers and claims data will be disclosed in the event of a request by a provider or a supplier, including the method for secure transmission.

State Law

Under Maryland law, the state requires security for payer data through encryption of beneficiary information and for each payer to maintain the security and preserve the confidentiality of encryption algorithms provided by MHCC. COMAR 10.25.06.05 states that MHCC shall provide each payer an encryption algorithm using one-way hashing consistent with the Advanced Encryption Standard (AES) recognized by the National Institute of Standards and Technology. Each payer shall encrypt patient/enrollee identifiers, internal subscriber contract numbers, and internal employer registration numbers in such a manner that each unique value for a data element produces an identical unique encrypted data element.

In addition, COMAR 10.25.06.12 ensures additional security safeguards by requiring that in order to protect the privacy and confidentiality of the data that payers submit to the APCD, safeguards developed in accordance with state agency data systems security practices shall be used; access to the APCD is limited to authorized personnel only, with that person's name identified in writing along with the scope of access for each authorized individual; and each authorized individual shall sign a confidentiality security agreement as specified by MHCC. Further, COMAR 10.25.06.17 requires that all disclosures of data that qualify as "directly or indirectly identifiable health information" shall be subject to review by the Institutional Review Board (IRB).

Recommended Approach

To date, the reports MHCC has produced from claims data has not needed any beneficiary-identifiable information. Becoming a QE requires a higher level of security assurance because MHCC will need the ability to release beneficiary-identifiable information to practitioners upon request. The state's encryption requirements will partially help to meet the security requirements of QECP standard 3, but the QECP goes much further. Given the required level of security and the complexity of security requirements of the QECP, the Discern Team recommends the PPM program contract with a vendor that is well experienced with meeting the specific security requirements as outlined.

Consumer & Practitioner Usability

Maryland has had a high standard of consumer usability for its reports, as exemplified by its hospital performance reports. The PPM program should aim for this same high bar. The MHCC Hospital Guide (http://mhcc.maryland.gov/consumerinfo/hospitalguide/) contains separate reports for Patients, Practitioners and Hospital Leaders. The Patient guide helps consumers find a hospital that provides high quality of care for a specific medical condition (e.g., heart, lung, surgeries, maternal and newborn care, etc.) or compare hospital performance. It provides multiple levels of detail which helps to address different levels of health literacy and interest in performance reports on the part of consumers. There are both summary ratings of providers and drill-down capabilities for consumers who desire more detailed information, which is a key component of

usability. The Practitioner guide shows providers where hospitals are performing well and where they can improve, as well as how practitioners can provide quality care. The Hospital Leaders guide allows leaders to assess their hospital's performance and verify the data reported on their hospital.

These reports are all in-depth and easy to use as a result of research conducted to evaluate their usability.

QECP Requirements

Associated with QECP standard 7A, the PPM program will need to develop and submit as evidence, confidential provider performance reports and public performance reports that must include, performance results/ratings, level of reporting, explanation of any provider rating approaches (such as number of stars), indication of whether or not each measure included Medicare data, description of each performance measure, indication of performance measures in dispute. In addition the PPM program will need to submit evidence to support that both provider and public report dissemination plans include: information on how to locate reports, data of release and frequency of subsequent releases, method of distribution, target audiences, and source of contact information for target audiences.

Standard 7B, requires that the PPM program must show evidence of results of previous evaluation of reporting over 3 years, such as testing with users and use of evaluation to improve reporting (e.g., focus group summaries, survey results, website evaluations, etc.). The evidence must include information related to how report designers collect user feedback, the definition of "user", action plans or next steps resulting from user feedback, including whether the step has been implemented, process evaluation documents from the past 3 years for previous reporting efforts and description of the PPM program's continuous and ongoing reporting improvement process. Experience from any PPM program contractor is also relevant to meeting this element. As such, the PPM program should choose a vendor to work with that has at least 3 years' experience with the evaluation of reporting, testing with users and use of evaluation to improve reporting.

Ease of Use & Ability to Meet Varying Consumer Needs for Information

Consumer Usability Research

There is a good deal of research literature that addresses how consumers use quality information. This research is very relevant and specific to PPM program needs. As a prime example, the *Best Practices in Public Reporting* series, sponsored by the Agency for Healthcare Research and Quality (AHRQ) and authored by Dr's Judith Hibbard and Shoshanna Sofaer, was produced specifically to provide practical approaches to designing public reports that make health care performance information clear, meaningful, and usable by consumers.
http://www.ahrq.gov/legacy/qual/pubrptguide1.htm (2010) The series consists of three reports:

- Report 1: *How To Effectively Present Health Care Performance Data To Consumers*
    - This report focuses on the presentation of comparative health care performance data.

- Report 2: *Maximizing Consumer Understanding of Public Comparative Quality Reports: Effective Use of Explanatory Information*
    - This report focuses on the background information contained in public reports that frames the decision question, provides a context for using the information, and details the specifics of the data.
- Report 3: *How To Maximize Public Awareness and Use of Comparative Quality Reports Through Effective Promotion and Dissemination Strategies*
    - This report focuses on the promotion and dissemination of reports.

The reports cover a wide range of issues and challenges faced by those responsible for report development. Interestingly, the audiences for the reports are intended to be community collaboratives and others involved in the production, packaging, promotion, and dissemination of comparative health care quality and cost information for consumers, patients, and the general public. Highlights from each of the reports are included in appendix F.

Linking with Other Maryland Reports

As mentioned, Maryland has had a high standard of consumer usability for its reports, as exemplified by its hospital reports. These reports are all in-depth and easy to use as a result of research conducted to evaluate their usability. As users are familiar with the hospital performance reports portal, it makes sense to evaluate whether Maryland PPM program reports should be available on the same site and combined with the Hospital Guide. This should be further assessed and taken into consideration as PPM program performance report elements are designed. It may be the case that the PPM program reports should be designed to use a similar presentation, similar types of reports focused on consumers' conditions of interest, and similar ratings and measure groupings.

In addition, as Maryland Health Connection, (the state's health insurance marketplace/exchange), develops at the same time as the PPM program, the MHCC reports may be a logical companion. The performance reports could allow consumers considering health plans to evaluate the quality and costs of providers in those plans. This may be a longer-term requirement for the measurement system and should also be evaluated more thoroughly.

Of note, in Report 3 of the *Best Practices in Public Reporting* series, Hibbard and Sofaer (2010) bring attention to potential issues regarding multiple quality reports in a single community. They suggest that dueling reports can undermine the credibility of the information presented. They recommend that a fully integrated approach is the most sought after solution, but of course will take time, negotiation, and trust among the sponsors involved.

Follow Other Performance Measurement Program Models

Not only is it important to examine other performance reporting models in Maryland to set a standard for consumer usability, but it would also be valuable to assess other states' reports such as that of the Minnesota Community Measurement (MNCM). These types of programs have had years of experience producing and improving performance reports based upon feedback from engaged stakeholders, and would be a good model to understand and potentially follow.

Direct Consumer Input

Building the PPM performance reporting system may ultimately require more direct consumer input, which can be gained through focus groups, cognitive testing or both. Input may also be gained from directly engaging relevant stakeholders, which will be addressed more specifically in the next section.

Stakeholder Engagement

Approaches to Engage Consumer Advocacy Groups and Federal Agencies Familiar with Consumer Use of these Performance Measures

The Hibbard, Sofaer *Best Practices in Public Reporting* series (2010) places an emphasis on engagement of stakeholders both for contribution to report design and for ways of distributing the performance information in a way that will draw consumers' attention. The report series emphasizes the importance of identifying relevant groups and representatives that can contribute meaningfully to building and utilization of the performance reporting system.

More specially, Report 3 of the series lays out certain recommendations related to stakeholder engagement that are particularly relevant:

- Plan from the outset for promotion and dissemination
    - Pursue partnerships at the beginning that will be important for the end tasks of promotion and dissemination prior to making major decisions. Create a multi-stakeholder communication committee that includes representatives from consumer groups, physicians, hospitals, employers, unions, and government agencies. Many of these partners may have deep experience in marketing, advertising and web expertise that can be directly applied. Include those that can serve, reach and are trusted by the intended performance report audience, such as consumer and patient organizations. Involve these groups early and allow them to have a clear voice in decision-making.
- Engage those who can help you learn about and reach your audience
    - Include organizations that are knowledgeable about and trusted by the report's intended audiences. Employers can help reach their employees and their families; health plans can spread the word to their members; and providers can contribute to getting out the word out to patients. However, the stakeholders that are especially important to help learn about and reach the intended audience are consumer and patient advocacy groups. In addition to their other considerable contributions to reporting efforts, they can be a key resource for ensuring report promotion and dissemination. These organizations can help conduct formal and informal audience research to identify the kind of report to use to attract those you want to reach. Examples of such organizations include: Consumer advocacy organizations that

serve women, children, older adults, members of minority groups, and labor members, organizations that serve these populations, faith-based organizations, broad-based or policy-focused organizations.

- Use outreach to promote the report and facilitate its use
    - *Outreach* in this context refers to working with and through other organizations that have an ongoing relationship with one or more target audiences to help deliver the message. It is critical to build and sustain relationships with those who interact with the intended audience. For multi-stakeholder groups, partners are key.
    - Reach beyond partners to gain the widest possible awareness of the report. Show how the organizations and their members will benefit from working together on this. Work collaboratively with these organizations to identify the best tools for reaching their constituencies.
- Gather and analyze feedback on the report and its promotion
    - Given the investment of time and effort in a public report, sponsors should have a mechanism to assess its impact. Knowing how many people a report reaches, whom it reaches, and how it is received and used will be helpful in refining future versions. Focus groups with key audiences will provide information about how well the report meets the needs of those subgroups. Community partners, such as employers, payers, and community organizations, may help by recruiting their members to participate in focus groups. Conducting two to four focus groups involving five to 12 participants each can yield a great deal of useful information.

Given the recommendations, it will be important to assess the relevance of engaging some of the following groups:

- MHCC Commissioners and the PPM Work Group;
- Local health improvement partnerships participating in the DHMH stakeholder engagement project, which this project is designed to support;
- National Partnership for Women & Families;
- AARP;
- Federal agencies including CMS and Medicare.gov; and
- Patient advocacy groups, both local and national,

The interests of all of these groups should be understood. Further, once the State Health Innovation Plan has been submitted to CMS in November of this year, there is much work in the journey from the current state to the desired outcome; work that must be accomplished as rapidly as possible while allowing the flexibility to adjust to unanticipated barriers and obstacles that will inevitably present themselves as the implementation process begins to move forward. Between the completion of the RFP and the receipt of funds to develop the program, we recommend proceeding with those parts of development that MHCC can conduct itself. This includes the recommended changes to the regulations to support comprehensive data on practitioners and consulting in more detail with consumer groups who can advise on the important considerations in public reporting. The current Work Group for the PPM includes a consumer-reporting expert. MHCC may wish to expand the Work Group for actual development to address this issue more fully, or may wish to use techniques to query actual consumers.

September 24th Work Group Member Feedback

The objectives of the PPM Work Group meeting held on September 24th were to:

- Solicit input on the information contained within this report
- Inform Work Group members on progress in creating a Maryland PPM and,
- Engage the Work Group members in active discussion about:
    - The future of the PPM system in Maryland
    - The assessment of current gaps in becoming a Qualified Entity (QE)
    - Lessons learned from PPM programs around the country
    - Engaging consumers in the PPM program
    - Identification of next steps and the future role of the Work Group

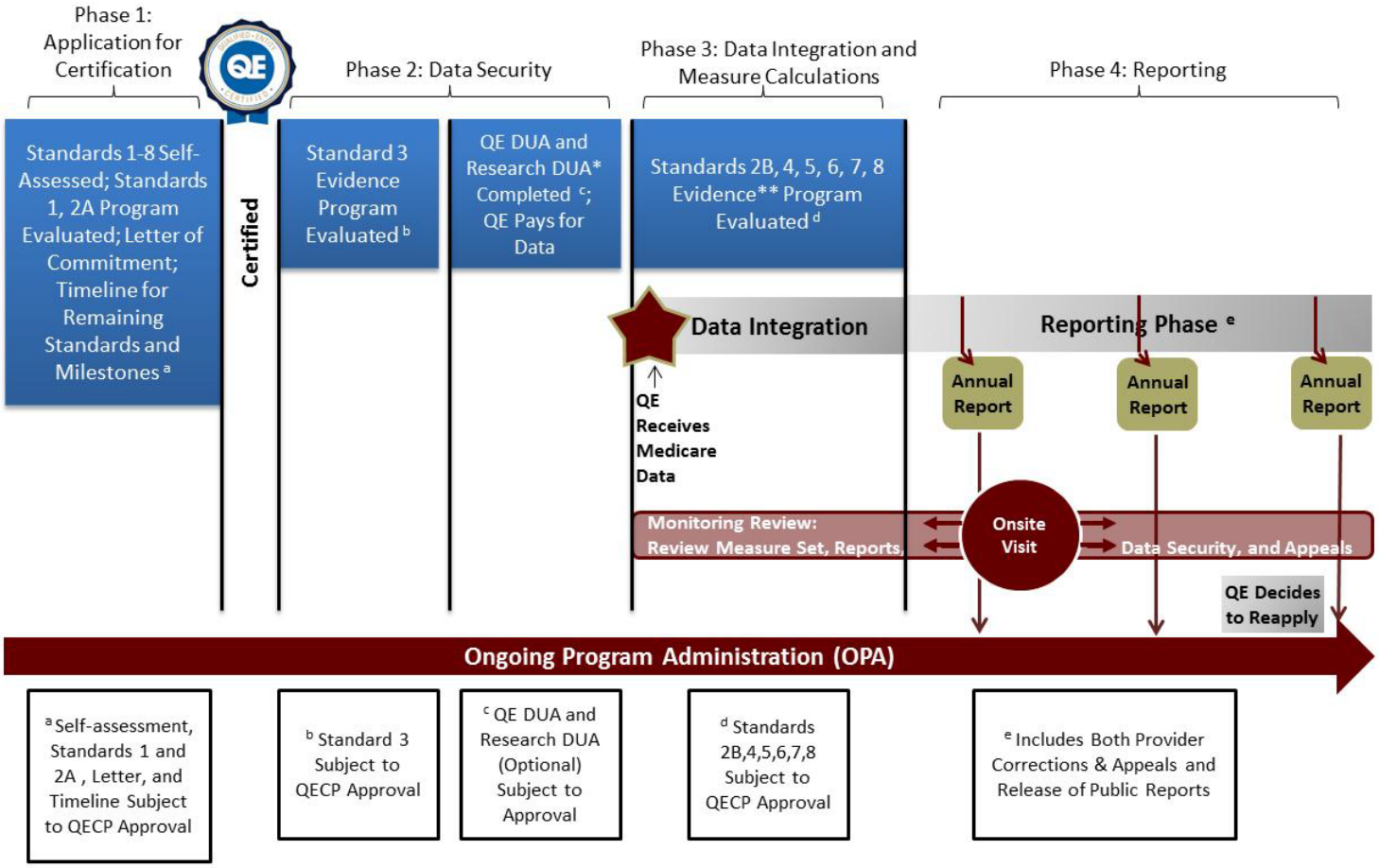
Feedback from the Work Group related to the discussion about QE readiness included:

- MHCC needs to provide practitioners with patient identifying information for corrections process.
- It is important to think about a potential clinical appeals process and to set expectations early on. If you choose to allow for clinical appeals, an organized appeals process is necessary to resolve these appeals in a timely manner.
- The Work Group pointed out that legal challenges could occur if physicians are not satisfied with their ability to rectify what they consider to be inaccuracies prior to public release.
- Carrier representatives stated that they are required to identify to the physician the patients that they are using to measure the physician. This allows to physician the opportunity to corroborate the results.
- The Work Group discussed implications of allowing practitioners to provide data that isn't administrative data to be accepted upon appeal.
- Generally, the Work Group cautioned that public measures might be perceived as a threat to the livelihood of physicians that receive low ratings. Every effort should be taken to include them in the process, hear their concerns and allow them to become comfortable with the process.
- The messaging needs to be clear that measurement isn't about penalizing physicians for outcomes they cannot control but to move to high value health care.
- Accuracy in measurement is very important.
- Work with practitioners to help them understand the measures and their importance. Provide evidence to support choice of measures; that they have an evidence base and are intended to reduce cost and improve care.
- Every effort must be made to involve physicians in the process early to increase acceptance of the program.
- There was a question of whether physicians would be punished for patient non-compliance.
- Different measures are used for different purposes. Connect measures to payer reform and health care redesign.

Feedback from the Work Group related to the discussion of lessons learned from PPM programs around the country:

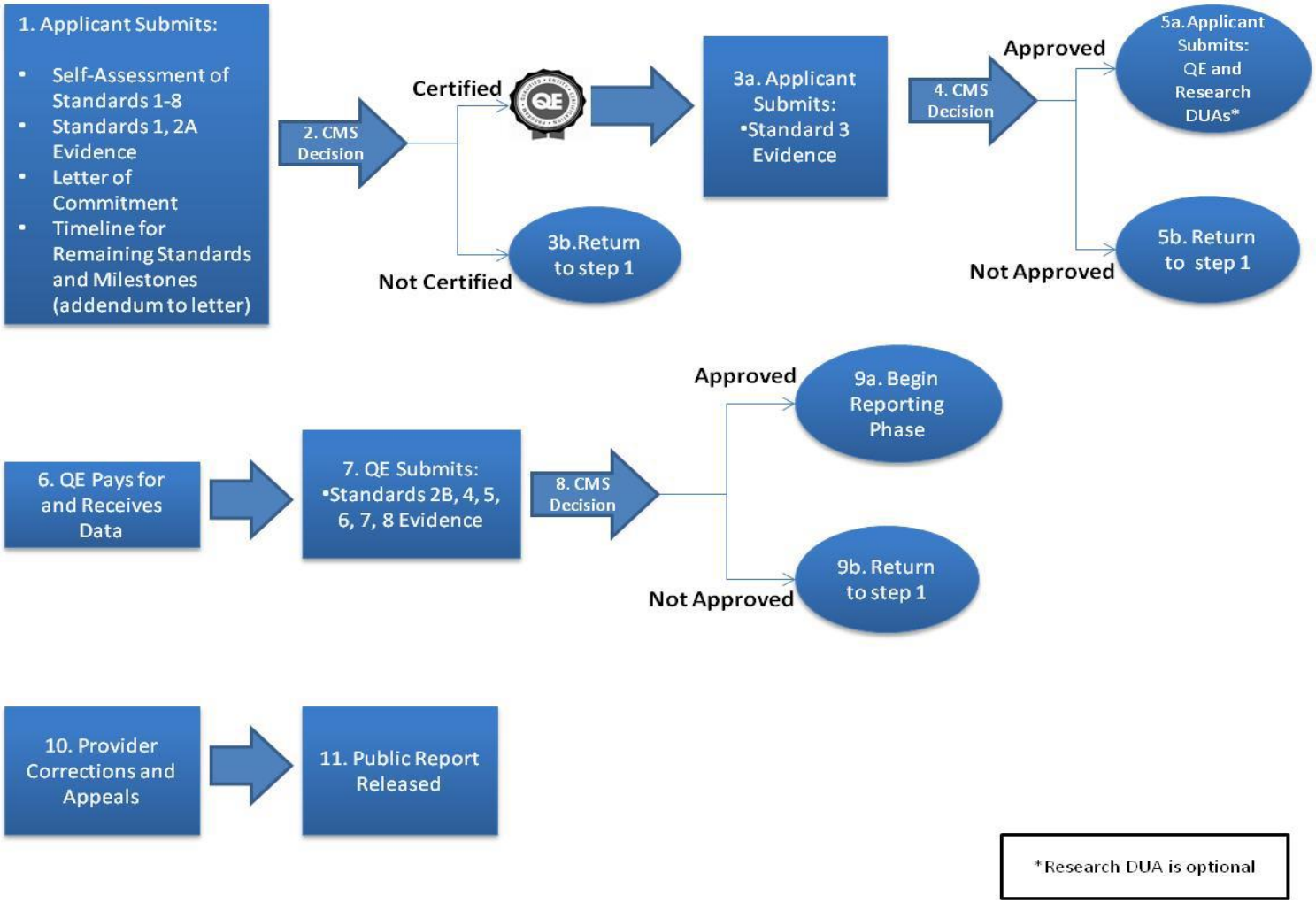
- Work Group members were interested in knowing what other organization results/outcomes were over the first few years of program implementation.
- Work Group members asked what milestones and challenges can be expected as the program is implemented, so that these can be anticipated and in the case of challenges, mitigated.
- There was question of whether there are plans to provide interventions to improve the scores of low performing physicians.
- The Work Group expressed the need for concrete data on what the outcomes and best practices are.
- There was also a question of what are other programs doing to help physicians improve their scores along the way.
- Work Group members expressed interest in asking other organizations about how they communicated with consumers to make the information more accessible and easy to understand.

Appendix A: CMS Schematic of QECP Process



Black vertical lines represent a phase that must be passed before progressing further in the program.
*The Research DUA is optional, and for those entities who wish to use the QE Medicare Data for purposes in addition to those allowed as part of the QE program. For more information, please see FAQ #14 on the QECP Portal, https://www.qemedicaredata.org.
**The evidence requirements for Standards reviewed during the data integration phase may include a request for updated information demonstrating the success of the data integration and measure calculation.

Appendix B: QECP Application Process Flowchart



Appendix C: QECP Phase 3 Evidence Requirements

Standard	Element	Requires Evidence of:	
		Actual Integrated Medicare Data	Experience
2.Data Sources	2B: Accurately combine Medicare claims data with claims data from other payer sources	X	X
4.Methodology for Attribution and Measurement	4A: Follow measure specifications	X	
	4B: Use a defined and transparent method for attribution of patients and episodes	X	X
	4C: Set and follow requirements to establish statistical validity of measure results for quality measures	X	X
	4D: Set and follow requirements to establish statistical validity of measure results for efficiency, effectiveness, and resource use measures	X	X
	4E: Use appropriate methods to employ risk adjustment	X	X
	4F: Use appropriate methods to handle outliers	X	X
	4G: Use comparison groups when evaluating providers or suppliers compared to each other	X	X
	4H: Use benchmarks when evaluation providers	X	X
5.Measure Selection	5A: Use standard measures	X	
	5B: Use approved alternative measures	X	
6.Validation Process	6A: Systematically evaluate accuracy of the measurement process and correct errors	X	X
7.Reporting of Performance Information	7A: Design reporting for provider, suppliers and the public	x	
	7B: Improve reporting		X
8. Requests for Corrections/ Appeals	8A: Use corrections process		X
	8B: Use secure transmission of beneficiary data	X	

Appendix D. Potential Quality and Cost Measures *(Sorted by Groups Based Upon Feasibility Given Data Requirements)*

While these tables list measures that are potentially available for use in the PPM program with acquisition of certain data elements, further determination of their feasibility within the PPM program will need to be established. Assessments such as accuracy of the data that feed the variables within measures, the look-back requirement of the measures and the associated number of years of data that will feed the program are just some examples of factors that will need to be evaluated.

Table A. Groups of Potential Quality Measures for the PPM

NQF	Measure Title	Description	Steward	Provider Type
Group 1: Quality Measures Potentially Ready for Use (some require revenue codes and a multiple year look back)				
1392	Well-Child Visits in the First 15 Months of Life	Percentage of patients who turned 15 months old during the measurement year and who had the following number of well-child visits with a PCP during their first 15 months of life.	NCQA	Primary Care (Pediatrics, Family Practitioner)
1516	Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life	Percentage of patients 3–6 years of age who received one or more well-child visits with a PCP during the measurement year	NCQA	Primary Care (Pediatrics, Family Practitioner)
0038	Childhood Immunization Status	Percentage of children 2 years of age who had four diphtheria, tetanus and acellular pertussis (DtaP); three polio (IPV); one measles, mumps and rubella (MMR); three H influenza type B(HiB); three hepatitis B (HepB); one chicken pox (VZV); four pneumococcal conjugate (PCV); two hepatitis A (HepA); two or three rotavirus (RV); and two influenza (flu) vaccines by their second birthday. The measure calculates a rate for each vaccine and nine separate combination rates.	NCQA	Primary Care (Pediatrics, Family Practitioner)
0579	Annual Cervical Cancer Screening or Follow-Up in High Risk Women	This measure identifies women age 12 to 65 diagnosed with cervical dysplasia (CIN 2), cervical carcinoma-in-situ, or HIV/AIDS prior to the measurement year, and who still have a cervix, who had a cervical CA screen during the measurement year.	Resolution Health	Primary Care (OB/GYN, Family Practitioner)
1517	Prenatal & Postpartum Care	The percentage of deliveries of live births between November 6 of the year prior to the measurement year and November 5 of the measurement year. For these women, the measure assesses the following facets of prenatal and postpartum care. • Rate 1: Timeliness of Prenatal Care. The percentage of	NCQA	Primary Care (OB/GYN, Family Practitioner)

NQF	Measure Title	Description	Steward	Provider Type
Group 1: Quality Measures Potentially Ready for Use (some require revenue codes and a multiple year look back)				
		deliveries that received a prenatal care visit in the first trimester • Rate 2: Postpartum Care. The percentage of deliveries that had a postpartum visit on or between 21 and 56 days after delivery.		
N/A	Breast Cancer Screening	Percentage of eligible women 40-69 who receive a mammogram in a two year period.	NCQA	Primary Care (OB/GYN, Family Practitioner, Internist)
0577	Use of Spirometry Testing in the Assessment/Diagnosis of COPD	This measure assesses the percentage of patients 40 years of age and older with a new diagnosis of COPD or newly active COPD, who received appropriate spirometry testing to confirm the diagnosis.	NCQA	Primary Care (Family Practitioner, Internist), Pulmonology
0075	Ischemic Vascular Disease: Complete Profile	The percentage of patients 18 years of age and older who were discharged alive for acute myocardial infarction (AMI), coronary artery bypass graft (CABG) or percutaneous coronary interventions (PCI) from January 1–November 1 of the year prior to the measurement year, or who had a diagnosis of ischemic vascular disease (IVD) during the measurement year and the year prior to measurement year, who had each of the following during the measurement year. • Complete Lipid Profile • LDL-C control <100 mg/dL	NCQA	Primary Care (Family Practitioner, Internist), Cardiology
0600	New Atrial Fibrillation: Thyroid Function Test	This measure identifies patients with new-onset atrial fibrillation during the measurement year who have had a thyroid function test 6 weeks before or after the diagnosis of atrial fibrillation.	Resolution Health	Primary Care (Family Practitioner, Internist), Cardiology
0592	Rheumatoid Arthritis Annual ESR or CRP	This measure identifies adult patients with a history of rheumatoid arthritis who have received erythrocyte sedimentation rate (ESR) or C-reactive protein (CRP) lab tests during the measurement year.	Resolution Health	Primary Care (Family Practitioner, Internist), Rheumatology
0052	Use of Imaging Studies for Low Back Pain	The percentage of patients with a primary diagnosis of low back pain who did not have an imaging study (plain x-ray, MRI, CT scan) within 28 days of the diagnosis.	NCQA	Primary Care (Family Practitioner, Internist), Multiple

NQF	Measure Title	Description	Steward	Provider Type
Group 2: Quality Measures for Use with Pharmacy Data (some also require revenue codes and a multiple year look back)				
0022	Use of High Risk Medications in the Elderly	a: Percentage of Medicare patients 66 years of age and older who received at least one high-risk medication. b: Percentage of Medicare patients 66 years of age and older who received at least two different high-risk medications.	NCQA	Primary Care (Family Practitioner, Internist, Geriatrician), Multiple
0053	Osteoporosis Management in Women Who Had a Fracture	The percentage of women 67 years of age and older who suffered a fracture and who had either a bone mineral density (BMD) test or prescription for a drug to treat or prevent osteoporosis in the six months after the date of fracture.	NCQA	Primary Care (Family Practitioner, Internist, Geriatrician), Multiple
0069	Appropriate treatment for children with upper respiratory infection	Percentage of children 3 months to 18 years of age with a diagnosis of URI who were not dispensed an antibiotic medication.	NCQA	Primary Care, (Pediatrics)
0036	Use of appropriate medications for people with asthma	The measure assesses the percentage of patients 5-64 years of age during the measurement year who were identified as having moderate to severe persistent asthma and who were appropriately prescribed medication during the measurement year.	NCQA	Primary Care (Family Practitioner, Internist, Pediatrics), Pulmonology
0002	Appropriate Testing for Children With Pharyngitis	The percentage of children 2–18 years of age who were diagnosed with pharyngitis, dispensed an antibiotic and received a group A streptococcus (strep) test for the episode. A higher rate represents better performance (i.e., appropriate testing).	NCQA	Primary Care (Pediatrics, Family Practitioner)
0663	Patient(s) 2 years of age and older with acute otitis externa who were NOT prescribed systemic antimicrobial therapy.	This measure identifies patients 2 years of age and older with acute otitis externa who were or were not prescribed systemic antimicrobial therapy.	Optum	Primary Care (Pediatrics, Family Practitioner), ENT
0108	Follow-Up Care for Children Prescribed ADHD Medication	The percentage of children newly prescribed attention-deficit/hyperactivity disorder (ADHD) medication who had at least three follow-up care visits within a 10-month period, one of which was within 30 days of when the first ADHD medication was dispensed. Two rates are reported. • Initiation Phase • Continuation and Maintenance (C&M) Phase.	NCQA	Primary Care, (Pediatrics, Family Practitioner)

NQF	Measure Title	Description	Steward	Provider Type
Group 2: Quality Measures for Use with Pharmacy Data (some also require revenue codes and a multiple year look back)				
0033	Chlamydia screening in women	Assesses the percentage of women 16–24 years of age who were identified as sexually active and who had at least one test for chlamydia during the measurement year.	NCQA	Primary Care (Family Practitioner, Internist, OB/GYN)
0071	Persistence of Beta-Blocker Treatment After Heart Attack	The percentage of patients age 18 years and older during the measurement year who were hospitalized and discharged alive July 1 of the year prior to the measurement year through June 30 of the measurement year with a diagnosis of acute myocardial infarction (AMI) and who received persistent beta-blocker treatment for six months after discharge.	NCQA	Primary Care (Family Practitioner, Internist), Cardiology
0569	Adherence to Statins	To ensure that patients who are taking statins to treat hyperlipidemia filled sufficient medication to have at least 80% coverage during the measurement year.	Health Benchmarks	Primary Care (Family Practitioner, Internist), Cardiology
0543	Adherence to Statin Therapy for Individuals with CAD	The percentage of individuals with Coronary Artery Disease (CAD) who are prescribed statin therapy that had a Proportion of Days Covered (PDC) for statin medications of at least 0.8 during the measurement period (12 consecutive months).	CMS	Primary Care (Family Practitioner, Internist), Cardiology
0555	Lack of Monthly INR Monitoring for Individuals on Warfarin	Average percentage of monthly intervals in which individuals with claims for warfarin do not receive an International Normalized Ratio (INR) test during the measurement period.	CMS	Primary Care (Family Practitioner, Internist), Cardiology
0556	INR for Individuals Taking Warfarin and Interacting Anti-Infective Medications	Percentage of episodes with an International Normalized Ratio (INR) test performed 3 to 7 days after a newly-started interacting anti-infective medication for Part D individuals receiving warfarin	CMS	Primary Care (Family Practitioner, Internist), Cardiology
0583	Dyslipidemia new med 12-week lipid test	This measure identifies patients age 18 or older who started lipid-lowering medication during the measurement year and had a lipid panel checked within 3 months after starting drug therapy.	Resolution Health	Primary Care (Family Practitioner, Internist), Cardiology
0605	Patient(s) with hypertension that had a serum creatinine in last 12 months.	This measure identifies patients with hypertension (HTN) that had a serum creatinine in last 12 reported months	Optum	Primary Care (Family Practitioner, Internist), Cardiology

NQF	Measure Title	Description	Steward	Provider Type
Group 2: Quality Measures for Use with Pharmacy Data (some also require revenue codes and a multiple year look back)				
0581	Deep Vein Thrombosis Anticoagulation >= 3 Months	This measure identifies patients with deep vein thrombosis (DVT) on anticoagulation for at least 3 months after the diagnosis	Resolution Health	Cardiology
0593	Pulmonary Embolism Anticoagulation >= 3 Months	This measure identifies patients with pulmonary embolism (PE) on anticoagulation for at least 3 months after the diagnosis.	Resolution Health	Cardiology, Pulmonology
0594	Post MI, w/hypertension, diabetes or HF: ACE inhibitor or ARB therapy	This measure identifies patients with ST elevation MI (STEMI), or non-ST elevation MI (NSTEMI) plus a history of hypertension, heart failure and/or diabetes prior to the measurement year who are taking an ACEI or an ARB during the measurement year.	Resolution Health	Cardiology
0588	PCI: Stent drug-eluting clopidogrel	This measure identifies patients undergoing percutaneous coronary intervention (PCI) with placement of a drug-eluting intracoronary stent during the first 9 months of the measurement year, who filled a prescription for clopidogrel in the 3 months following stent placement.	Resolution Health	Cardiology
0586	Warfarin PT/ INR Test	This measure identifies the percentage of patients taking warfarin during the measurement year who had at least one PT/INR test within 30 days after the first warfarin prescription in the measurement year	Resolution Health	Cardiology
0578	Ambulatory initiated Amiodarone Therapy: TSH Test	This measure identifies the percentage of patients who had a TSH baseline measurement at the start of amiodarone therapy	Resolution Health	Cardiology
0542	Adherence to Chronic Medications	The measure addresses adherence to three types of chronic medications: statins, levothyroxine, and angiotensin converting enzyme inhibitors (ACEIs)/angiotensin receptor blockers (ARBs). The measure is divided into three sub-measures.	CMS	Primary Care(Family Practitioner, Internist), Cardiology, Endocrinology
0545	Adherence to Chronic Medications for Individuals with Diabetes	The measure addresses adherence to three types of chronic medications; statins, angiotensin converting enzyme inhibitors (ACEIs)/angiotensin receptor blockers (ARBs) and oral hypoglycemic agents. The measure is divided into three sub-measures.	CMS	Primary Care (Family Practitioner, Internist), Endocrinology

NQF	Measure Title	Description	Steward	Provider Type
Group 2: Quality Measures for Use with Pharmacy Data (some also require revenue codes and a multiple year look back)				
0603	Adult(s) taking insulin with evidence of self-monitoring blood glucose testing.	This measure identifies patients with diabetes mellitus taking insulin that had evidence of self-monitoring blood glucose testing in last 12 reported months.	Optum	Primary Care (Family Practitioner, Internist), Endocrinology
0057	Comprehensive Diabetes Care: Hemoglobin A1c (HbA1c) testing	The percentage of patients 18-75 years of age with diabetes (type 1 and type 2) who received an HbA1c test during the measurement year.	NCQA	Primary Care (Family Practitioner, Internist), Endocrinology
0063	Comprehensive Diabetes Care: LDL-C Screening	The percentage of patients 18-75 years of age with diabetes (type 1 and type 2) who received an LDL-C test during the measurement year.	NCQA	Primary Care (Family Practitioner, Internist), Endocrinology
0055	Comprehensive Diabetes Care: Eye Exam	The percentage of patients 18-75 years of age with diabetes (type 1 and type 2) who received a retinal or dilated eye exam during the measurement year or a negative retinal or dilated eye exam in the year prior to the measurement year.	NCQA	Primary Care (Family Practitioner, Internist), Endocrinology
0604	Adult(s) with diabetes mellitus that had a serum creatinine in last 12 reported months.	This measure identifies adults with diabetes mellitus that had a serum creatinine test in last 12 reported months.	Optum	Primary Care (Family Practitioner, Internist), Endocrinology
0060	Hemoglobin A1c (HbA1c) Testing for Diabetic Pediatric Patients	Percentage of pediatric patients aged 5-17 years of age with diabetes who received an HbA1c test during the measurement year.	NCQA	Primary Care (Pediatrics, Family Practitioner), Endocrinology
0709	Proportion of patients with a chronic condition that have a potentially avoidable complication during a calendar year.	Percent of adult population aged 18 – 65 years who were identified as having at least one of the following six chronic conditions: Diabetes Mellitus (DM), Congestive Heart Failure (CHF), Coronary Artery Disease (CAD), Hypertension (HTN), Chronic Obstructive Pulmonary Disease (COPD) or Asthma, were followed for one-year, and had one or more potentially avoidable complications (PACs).	Bridges To Excellence	Primary Care
0054	DMARD Therapy for Rheumatoid Arthritis	The percentage of patients 18 years and older by the end of the measurement period, diagnosed with rheumatoid arthritis and who had at least one ambulatory prescription for a disease-modifying anti-rheumatic drug (DMARD).	NCQA	Primary Care (Family Practitioner, Internist), Rheumatology

NQF	Measure Title	Description	Steward	Provider Type
Group 2: Quality Measures for Use with Pharmacy Data (some also require revenue codes and a multiple year look back)				
0589	Rheumatoid Arthritis New DMARD Baseline Serum Creatinine	This measure identifies adult patients with a diagnosis of rheumatoid arthritis who received appropriate baseline serum creatinine testing within 90 days before to 14 days after the new start of methotrexate, leflunomide, azathioprine, D-Penicillamine, intramuscular gold, cyclosporine, or cyclophosphamide during the measurement year.	Resolution Health	Rheumatology
0590	Rheumatoid Arthritis New DMARD Baseline Liver Function Test	This measure identifies adult patients with a diagnosis of rheumatoid arthritis who received appropriate baseline liver function testing (AST or ALT) within 90 days before to 14 days after the new start of sulfasalazine, methotrexate, leflunomide, azathioprine, cyclosporine or cyclophosphamide during the measurement year.	Resolution Health	Rheumatology
0591	Rheumatoid Arthritis New DMARD Baseline CBC	This measure identifies adult patients with a diagnosis of rheumatoid arthritis who received appropriate baseline complete blood count (CBC) testing within 90 days before to 14 days after the new start of sulfasalazine, methotrexate, leflunomide, azathioprine, D-Penicillamine, intramuscular gold, oral gold, cyclosporine, or cyclophosphamide during the measurement year.	Resolution Health	Rheumatology
0597	RA: Methotrexate: LFT within 12 weeks	This measure identifies adult patients with rheumatoid arthritis who were prescribed at least a 6-month supply of methotrexate during the measurement year and received a liver function test (LFT) in the 120 days (3 months + 1 month grace period) following the earliest observed methotrexate prescription claim.	Resolution Health	Rheumatology
0598	RA: Methotrexate: CBC within 12 weeks	This measure identifies adult patients with rheumatoid arthritis who were prescribed at least a 6-month supply of methotrexate during the measurement year and received a CBC test within 120 days (3 months + 1 month grace period) following the earliest observed methotrexate prescription claim	Resolution Health	Rheumatology
0599	RA: Methotrexate: Creatinine within 12 weeks	This measure identifies adult patients with rheumatoid arthritis who were prescribed at least a 6-month supply of methotrexate during the measurement year and received a serum creatinine test in the 120 days (3 months + 1 month grace period) after the	Resolution Health	Rheumatology

NQF	Measure Title	Description	Steward	Provider Type
Group 2: Quality Measures for Use with Pharmacy Data (some also require revenue codes and a multiple year look back)				
		earliest observed methotrexate prescription claim.		
0585	Rheumatoid Arthritis: Hydroxychloroquine annual eye exam	This measure identifies the percentage of patients with Rheumatoid Arthritis who received hydroxychloroquine during the measurement year and had a fundoscopic examination during the measurement year or in the year prior to the measurement year	Resolution Health	Rheumatology
0564	Complications within 30 Days Following Cataract Surgery Requiring Additional Surgical Procedures	Percentage of patients aged 18 years and older with a diagnosis of uncomplicated cataract who had cataract surgery and had any of a specified list of surgical procedures in the 30 days following cataract surgery which would indicate the occurrence of any of the following major complications: retained nuclear fragments, endophthalmitis, dislocated or wrong power IOL, retinal detachment, or wound dehiscence.	AMA-PCPI	Ophthalmology

NQF	Measure Title	Description	Steward	Provider Type
Group 3: Quality Measures for Use with CPT II Codes				
0326	Care for Older Adults- Advance Care Plan	Percentage of patients aged 65 years and older who have an advance care plan or surrogate decision maker documented in the medical record or documentation in the medical record that an advance care plan was discussed but the patient did not wish or was not able to name a surrogate decision maker or provide an advance care plan	NCQA	Primary Care (Family Practitioner, Internist, Geriatrician)
0553	Care for Older Adults – Medication Review	Percentage of adults 66 years and older who had a medication review; a review of all a patient's medications, including prescription medications, over-the-counter (OTC) medications and herbal or supplemental therapies by a prescribing practitioner or clinical pharmacist.	NCQA	Primary Care (Family Practitioner, Internist, Geriatrician)

NQF	Measure Title	Description	Steward	Provider Type
Group 3: Quality Measures for Use with CPT II Codes				
0097	Medication Reconciliation-Post Discharge	Percentage of patients aged 65 years and older discharged from any inpatient facility (e.g. hospital, skilled nursing facility, or rehabilitation facility) and seen within 60 days following discharge in the office by the physician providing on-going care who had a reconciliation of the discharge medications with the current medication list in the medical record documented.	NCQA	Primary Care (Family Practitioner, Internist, Geriatrician)
0315	Back Pain: Appropriate Imaging for Acute Back Pain	Percentage of patients at least 18 years of age and younger than 80 with a diagnosis of back pain for whom the physician ordered imaging studies during the six weeks after pain onset, in the absence of "red flags" (overuse measure, lower performance is better).	NCQA	Primary Care (Family Practitioner, Internist), Orthopedic
0313	Back Pain: Advice Against Bed Rest	Percentage of patients at least 18 years of age and younger than 80 with a back pain episode of 28 days or more with medical record documentation that a physician advised them against bed rest lasting four days or longer.	NCQA	Primary Care (Family Practitioner, Internist), Orthopedic
0314	Back Pain: Advice for Normal Activities	Percentage of patients at least 18 years of age and younger than 80 with a back pain episode of 28 days or more with medical record documentation that a physician advised them to maintain or resume normal activities.	NCQA	Primary Care (Family Practitioner, Internist), Orthopedic
0319	Back Pain: Physical Exam	Percentage of patients at least 18 years of age and younger than 80 with a back pain episode of 28 days or more with documentation of a physical examination on the date of the initial visit with the physician.	NCQA	Primary Care (Family Practitioner, Internist), Orthopedic
0051	Osteoarthritis (OA): Assessment for use of anti-inflammatory or analgesic over-the-counter (OTC) medications	Percentage of patient visits for patients aged 21 years and older with a diagnosis of OA with an assessment for use of anti-inflammatory or analgesic OTC medications	AMA-PCPI	Primary Care(Family Practitioner, Internist), Orthopedic
0643	Cardiac Rehabilitation Patient Referral From an Outpatient Setting	Percentage of patients evaluated in an outpatient setting who in the previous 12 months have experienced an acute myocardial infarction or chronic stable angina or who have undergone coronary artery bypass (CABG) surgery, a percutaneous coronary intervention (PCI), cardiac valve surgery (CVS), or cardiac transplantation, who have not already participated in an	ACC	Primary Care (Family Practitioner, Internist), Cardiology

NQF	Measure Title	Description	Steward	Provider Type
Group 3: Quality Measures for Use with CPT II Codes				
		early outpatient cardiac rehabilitation/secondary prevention program for the qualifying event, and who are referred to an outpatient cardiac rehabilitation/secondary prevention program.		
0078	Heart Failure : Assessment of Clinical Symptoms of Volume Overload	Percentage of patient visits or patients with HF with assessment of clinical symptoms of volume overload (excess).	AMA-PCPI	Cardiology
0088	Diabetic Retinopathy: Documentation of Presence or Absence of Macular Edema and Level of Severity of Retinopathy	Percentage of patients aged 18 years and older with a diagnosis of diabetic retinopathy who had a dilated macular or fundus exam performed which included documentation of the level of severity of retinopathy and the presence or absence of macular edema during one or more office visits within 12 months	AMA-PCPI	Ophthalmology
0087	Age-Related Macular Degeneration: Dilated Macular Examination	Percentage of patients aged 50 years and older with a diagnosis of AMD who had a dilated macular examination performed which included documentation of the presence or absence of macular thickening or hemorrhage AND the level of macular degeneration severity during one or more office visits within 12 months.	AMA-PCPI	Ophthalmology
0086	Primary Open Angle Glaucoma (POAG): Optic Nerve Evaluation	Percentage of patients aged 18 years and older with a diagnosis of POAG who have an optic nerve head evaluation during one or more office visits within 12 months	AMA-PCPI	Ophthalmology
0563	Primary Open-Angle Glaucoma: Reduction of Intraocular Pressure by 15% or Documentation of a Plan of Care	Percentage of patients aged 18 years and older with a diagnosis of primary open-angle glaucoma whose glaucoma treatment has not failed (the most recent IOP was reduced by at least 15% from the pre-intervention level) OR if the most recent IOP was not reduced by at least 15% from the pre-intervention level a plan of care was documented within 12 months	AMA-PCPI	Ophthalmology
0565	Cataracts: 20/40 or Better Visual Acuity within 90 Days Following Cataract Surgery	Percentage of patients aged 18 years and older with a diagnosis of uncomplicated cataract who had cataract surgery and no significant ocular conditions impacting the visual outcome of surgery and had best-corrected visual acuity of 20/40 or better	AMA-PCPI	Ophthalmology

NQF	Measure Title	Description	Steward	Provider Type
Group 3: Quality Measures for Use with CPT II Codes				
		(distance or near) achieved within 90 days following the cataract surgery		
0566	Age-Related Macular Degeneration (AMD): Counseling on Antioxidant Supplement	Percentage of patients aged 50 years and older with a diagnosis of age-related macular degeneration or their caregiver(s) who were counseled within 12 months on the benefits and/or risks of the AREDS formulation for preventing progression of AMD.	AMA-PCPI	Ophthalmology
0622	GERD - Upper Gastrointestinal Study in Adults with Alarm Symptoms	The percentage of adult patients with gastroesophogeal reflux disease (GERD) with alarm symptoms who have had an upper gastrointestinal study	ActiveHealth Management	Gastroenterology
0653*	Acute Otitis Externa: Topical therapy	Percentage of patients aged 2 years and older with a diagnosis of AOE who were prescribed topical preparations	AMA-PCPI	Primary Care (Pediatrics, Family Practitioner), ENT
0654*	Acute Otitis Externa: Systemic antimicrobial therapy – Avoidance of inappropriate use	Percentage of patients aged 2 years and older with a diagnosis of AOE who were not prescribed systemic antimicrobial therapy	AMA-PCPI	Primary Care (Pediatrics, Family Practitioner), ENT
0655*	Otitis Media with Effusion: Antihistamines or decongestants – Avoidance of inappropriate use	Percentage of patients aged 2 months through 12 years with a diagnosis of OME were not prescribed or recommended to receive either antihistamines or decongestants	AMA-PCPI	Primary Care (Pediatrics, Family Practitioner), ENT
0656*	Otitis Media with Effusion: Systemic corticosteroids – Avoidance of inappropriate use	Percentage of patients aged 2 months through 12 years with a diagnosis of OME who were not prescribed systemic corticosteroids	AMA-PCPI	Primary Care (Pediatrics, Family Practitioner), ENT
0657*	Otitis Media with Effusion: Systemic antimicrobials – Avoidance of inappropriate use	Percentage of patients aged 2 months through 12 years with a diagnosis of OME who were not prescribed systemic antimicrobials	AMA-PCPI	Primary Care (Pediatrics, Family Practitioner), ENT
0046^*	Osteoporosis: Screening or Therapy for Women Aged 65	Percentage of female patients aged 65 years and older who have a central DXA measurement ordered or performed at least once	NCQA	Primary Care (Family Practitioner, Internist,

NQF	Measure Title	Description	Steward	Provider Type
Group 3: Quality Measures for Use with CPT II Codes				
	Years and Older	since age 60 or pharmacologic therapy prescribed within 12 months.		Geriatrician),
0048*	Osteoporosis: Management Following Fracture of Hip, Spine, or Distal Radius for Men and Women Aged 50 and Older	Percentage of patients aged 50 years or older with fracture of the hip, spine or distal radius that had a central DXA measurement ordered or performed or pharmacologic therapy prescribed	NCQA	Primary Care (Family Practitioner, Internist, Geriatrician), Orthopedic
0049*	Osteoporosis: Pharmacologic Therapy for Men and Women Aged 50 Years and Older	Percentage of patients aged 50 years and older with a diagnosis of osteoporosis who were prescribed pharmacologic therapy within 12 months	NCQA	Primary Care(Family Practitioner, Internist, Geriatrician), Orthopedic
0047*	Asthma: Pharmacologic Therapy for Persistent Asthma	Percentage of patients aged 5 through 50 years with a diagnosis of persistent asthma who were prescribed long-term control medication. Three rates are reported for this measure.	AMA-PCPI	Primary Care (Family Practitioner, Internist, Pediatrics), Pulmonology
0067*	Chronic Stable Coronary Artery Disease: Antiplatelet Therapy	Percentage of patients aged 18 years and older with a diagnosis of coronary artery disease seen within a 12 month period who were prescribed aspirin or clopidogrel	AMA-PCPI	Primary Care(Family Practitioner, Internist), Cardiology
0056*	Diabetes: Foot Exam	The percentage of patients 18-75 years of age with diabetes (type 1 and type 2) who received a foot exam (visual inspection with either a sensory exam or a pulse exam) during the measurement year.	NCQA	Primary Care (Family Practitioner, Internist), Endocrinology
0096*	Empiric Antibiotic for Community-Acquired Bacterial Pneumonia	Percentage of patients aged 18 years and older with a diagnosis of community-acquired bacterial pneumonia with an appropriate empiric antibiotic prescribed	AMA-PCPI	Primary Care (Family Practitioner, Internist), Pulmonology
N/A *	Heart Failure (HF): Warfarin Therapy Patients with Atrial Fibrillation	Percentage of patients aged 18 years and older with a diagnosis of HF who also have LVSD who were prescribed ACE inhibitor or ARB therapy.	AMA-PCPI	Cardiology

^Requires G codes, * Requires pharmacy data

Appendix E: MNCM Policy and Procedure - Appeals of Clinical Data and Results

Policy Name: Appeals of Performance Data and Results	**Effective Date:** July, 2007
Policy Owner: Executive Director, MNCM	**Revision Date:** October, 2007; December 2007
Category of Policy: Quality Audit Committee of the Board	
DEFINITIONS: Appeal of performance result- a formal request by an entity, on which MNCM reports performance results, for reconsideration of these performance results with the goal of finding a mutually acceptable solution.	
POLICY STATEMENT: MNCM has a formal process by which an entity can request reconsideration of a performance result either currently posted or to be posted on the MNCM Web site (www.mnhealthcare.org). Before each posting of results on the MNCM Web site, MNCM staff will provide every reportable entity two weeks to review their result(s). After this two week period, MNCM will post results on its web site. The review process timeline begins with an e-mail message sent to each reportable entity along with their data and the following information: • The review period timeline and the date the data will be posted on the MNCM website • For concerns about the performance data - the timeframe to get the concern to MNCM, the MNCM staff person name and phone number and e-mail address • MNCM will respond to the concern ASAP and get review decision back to medical group • If the medical group has an ongoing concern about the performance results after the response from MNCM; the timeline for and how to submit an appeal (including proper areas/topics for appeal) MNCM will post on its web site and publish in the final, written report the results on each entity unless a formal appeal has been submitted*. As appropriate, performance results under appeal by a reportable entity will be noted on the MNCM web site as "results under review". Publication of the final, written report will be held until appeals have been resolved and results have been finalized. As a policy, MNCM will not make performance result changes unless an entity can prove errors or if a pattern of data issues/errors can be identified by MNCM based upon multiple comments and/or concerns. Furthermore, if the performance results under investigation and appeal (and subsequent request for recalculation and public reporting of rates) are within confidence intervals of original rate, MNCM has the option to not extend resources to investigate appeal or recalculate rates. It is also a policy that MNCM will not postpone public reporting or suppression of web posted and published results solely based upon an entity not agreeing to a MNCM measurement specification, data collection process or method and/or that their internally collected rates do not match MNCM results. These concerns will be shared with the Reporting Advisory and/or Data Planning Committee, as appropriate. If after discussions with MNCM staff, an entity has remaining concerns about the accuracy of data	

posted on the MNCM web site, published in a report (or to be published) these concerns must be formally presented to MNCM in the form of a written appeal and have evidence that supports the concern.

All appeals will be reviewed by the MNCM Executive Director who will make recommendations to the MNCM Quality Audit Committee. The MNCM Quality Audit Committee has the authority to make decisions about the dispensation of the appeal.

* MN Community Measurement will give the option to any new entity being reported on for the first time on established measures to suppress their data from being publicly reported for the first year.

- The decision to publicly report or to suppress the data will be made after the entity has seen its data.
- This option does not apply to clinic (sites) that are part of medical groups on which MNCM has previously reported.

ASSOCIATED PROCEDURES:

1. Medical groups will be sent their performance results along with information on the review process time line.
2. If a medical group has concerns about their performance result, they may communicate their concerns to MNCM staff within the timeline specified.
3. MNCM staff will respond to the concern and provide additional information as requested and as possible.
4. Medical Group will investigate performance results and submit evidence to MNCM if they are requesting a change in their performance results.
5. MNCM staff will review the evidence and Executive Director will make a decision based upon the medical group request and evidence submitted.
6. If Executive Director's decision is not in medical group's favor, medical group may submit a formal and written appeal to the MNCM Executive Director.
7. Appeals will be reviewed by the MNCM Executive Director.
8. The MNCM staff will investigate the appealed situation, document findings and form recommendations.
9. All appeals will be brought to the MNCM Quality Audit Committee along with the documented investigation, the findings and recommendation of the MNCM Executive Director.
10. The MNCM Quality Audit Committee will determine if additional information is needed, and how best to gather and receive this information. However, any appellant who wishes to make a presentation to the Committee shall be granted the opportunity to do so.
11. The MNCM Quality Audit Committee will make decisions about the dispensation of each
12. MNCM staff will annually collate information on the appeals and produce a summary of total number of appeals, what was appealed, how they were adjudicated and timing of appeals submitted.

LINKS & REFERENCES:

- MNCM Policy and Procedure: Verifying Accuracy of the Data
- MNCM Policy and Procedure: Working with Physicians on Measurement and Making Measurement Methodology Available

Appendix F. Highlights from the Best Practices in Public Reporting Series

(sponsored AHRQ and authored by Dr's Judith Hibbard and Shoshanna Sofaer*)*
http://www.ahrq.gov/legacy/qual/pubrptguide1.htm **(2010)**

Report 1: How to effectively present health care performance data to consumers.

- Challenges in designing a report card:
  - Consumers don't know there is a quality gap
  - Consumers and experts define quality differently
  - Quality measures hard to understand or not meaningful to consumers
    - E.g., consumers misinterpret high LOS and readmissions as good patient access
    - Measures often assume a higher level of clinical knowledge than consumers have (e.g., administration of ACE inhibitors)
    - If not understood, consumers will ignore it or view it as unimportant
  - Using quality information for decision making is difficult cognitive work
    - Have to process a large amount of information and make tradeoffs among different categories of factors
    - Reports don't provide guidance on how to act on the information
- Practical report design solutions
  - Make info more relevant to what consumers understand and care about
    - Present overall definition of quality that is understandable
      - Consumers understand patient experience and safety measures; process, volume and structural measures are more difficult
    - Define elements of quality and use as reporting categories
    - Include info on sponsor and methods to be credible and trusted
  - Make it easy for consumers to understand and use comparative info
    - Reduce cognitive burden by summarizing, interpreting, highlighting meaning, narrowing options
      - Use consistent metrics
      - Clarify if high means good or bad performance
      - Rank order providers by performance or within tiers
      - Label performance as "excellent" or "good", etc.
      - Use meaningful symbols instead of numbers
    - Reduce cognitive burden by bringing info together into a choice
      - Narrow options
      - Highlight differences
      - Help user differentially weight factors
      - Use summary measures and symbols
      - Allow user to narrow down number of data points
  - Test reports with consumers during development
- Cost information adds complexity to choices and can be misleading
  - Without quality data, consumers use cost as proxy for quality
- Consumers are not familiar with nor looking for efficiency

- Evokes concerns about cutting corners or saving money for health plan/employer at consumers expense
- Must label efficiency data carefully and test with consumers

Report 2: *Maximizing consumer understanding of public comparative quality reports: Effective use of explanatory information*

- *Recommendation 1:* Engage and motivate consumers to explore reports
  - First page of report is critical
  - Concisely state key messages, emphasize why info is important and relevant
  - Key points:
    - Brief definition of quality in consumer-oriented language
    - Reasons for publishing data
    - Reasons one should look at this info
    - Brief summary of info in the report
- *Recommendation 2:* Deepen consumers' understanding of health care quality and quality measures
  - Consumers aren't familiar with evidence that links clinical processes to patient outcomes which consumers care about
  - Reports only useful if connects to what consumers care about
  - Use explanatory info to make connection between what already care about and more sophisticated elements of quality they can easily understand and care about
  - Ensure reports make clear the aspects of quality they cover in everyday language
- *Recommendation 3:* Legitimize the report's sponsor and the report's credibility
  - Public needs to know data is objective, and sponsored and supported by trustworthy, expert sources
  - Description or mission statement of sponsor, why sponsor is issuing report, has no financial interest in impact of report on providers
  - Establish credibility by demonstrating fairness to those being rated
    - Conduct dry fun of data collection to provide to providers and allow them to comment; tell public about it in brief, plain language
  - Provide right level of detail to ensure credibility
    - Balance between technical details and summary information
    - Complex data presentation unlikely to be read or understood
    - Consumers may see info about statistical adjustments as a bad sign
    - Make technical info available in separate section toward back
  - Explain how scores were generated, including risk adjustment
    - Consumers understand adjustments based on age or severity of illness but react negatively to adjustments based on social factors such as education level, race, income, etc.
- *Recommendation 4:* Provide information about the importance, meaning and interpretation of specific measures
  - Simply, stated explanations around graphic data presentations
  - Describe how measures relate to quality and how to interpret graphics

    - Use terms consumers understand; use common terms with technical terms in parentheses
    - Have measures vetted by consumers to see if they find them important, relevant, appropriate to providers being rates
    - Explain different types of measures
    - Provide guidance on how to read graphs and understand measures
- *Recommendation 5:* Help consumers understand the implications of resource use information
- *Recommendation 6:* Help consumers avoid common pitfalls that lead to misinterpretation of quality data
    - Include caveats about certain measures that could be misleading, such as rare events
        - Exclude measures
        - Combine data for multiple years to diminish random noise
        - Aggregate data
        - Present data but add qualifying statement
        - Use counts instead of rates
- *Recommendation 7:* Provide consumers guidance and support in using the information
    - Decision support info to provide guidance and motivation for using quality info
    - How to put info together to make a decision
    - List of what consumers should think about when making a decision
    - Identify highest scoring or best value choices
    - Consumers want summary/roll-up scores
    - Call out key differences in performance
    - Provide examples of ways consumers can use information
    - Make explicit what actions consumers can take to protect themselves from poor-quality care
- *Recommendation 8:* Provide consumers appropriate access to more detailed technical information
    - Use layering and navigation aids to provide more detailed information
    - Good web report features:
        - Tabs at top to navigate main sections from anywhere in report
        - Tabs at side to navigate within report sections
        - Internal links from one part of report to another
    - Explanatory information at back of report
    - Allow vehicle for feedback and/or questions/clarification
- *Recommendation 9:* Test the report with consumers before going live
    - Cognitive interviews

Report 3: *How to Maximize Public Awareness and Use of Comparative Quality Reports Through Effective Promotion and Dissemination Strategies*

- *Recommendation 1:* Plan from the outset for promotion and dissemination
- *Recommendation 2:* Identify your audience as early as possible
- *Recommendation 3:* Engage those who can help you learn about and research your audience

- *Recommendation 4:* Use the insights of social marketing
- *Recommendation 5:* Be strategic about timing
- *Recommendation 6:* Be strategic about positioning
- *Recommendation 7:* Actively work with media to promote the report
- *Recommendation 8:* Use advertising to promote the report
- *Recommendation 9:* Use outreach to promote the report and facilitate its use
- *Recommendation 10:* Gather and analyze feedback on the report and its promotion