eCQM Affinity Group Session #5

Supplemental Session: Planning for EHR Vendor Capabilities and Review of eCQM Framework Sequencing
Agenda

• Introductions
• Maryland - Preparing for EHR Vendor Capacity
• eCQM Framework Sequencing
• Final discussion
Context: Affinity Group Objectives & Output

• Discuss CQM framework supporting:
  – Strategic planning for innovation and value based payment models;
  – Discussing governance and policy to support building measurement capacity;
  – Understanding technical models and considerations for choosing appropriate technical model for your state; and
  – Supporting quality improvement activities improving health, quality of care, and reducing costs.

• Output:
  – State-level Implementation Guide for eCQM Strategic Planning for Innovation Models and Value-based Payment Models
Maryland Medicaid eCQM Strategy

Adapting to the EHR Market
Outline

• Investigate
  – EHRs and eCQM calculation tools

• Evaluate
  – Specification, location of tool, trigger

• Implement
  – Vendor/Practice review, tool creation

• Revisit & Revise
Investigate: EHR Market

• Analyze vendor marketplace (ambulatory)

<table>
<thead>
<tr>
<th>EHR Vendor</th>
<th>Market Share (Medicaid)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epic</td>
<td>27%</td>
</tr>
<tr>
<td>GE Healthcare</td>
<td>11%</td>
</tr>
<tr>
<td>Allscripts</td>
<td>7%</td>
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<tr>
<td>eClinicalWorks</td>
<td>6%</td>
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<tr>
<td>NextGen Healthcare</td>
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<tr>
<td>Practice Fusion</td>
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</tr>
</tbody>
</table>

• eCQM Collection and Calculation
  – Build or leverage?

February 2, 2016
Evaluate

• Specification
  – QRDA, C-CDA, FHIR?
• eCQM Tool Location
  – SLR or HIE?
• Trigger
  – When is the data sent?
Implement

• Maryland: C-CDA, popHealth-like, HIE
• Approach:
  – State-wide contracts with vendors
  – Informaticists to review C-CDA
  – Modify popHealth
Revisit and Revise

• Assess proliferation of specs
  – QRDA, C-CDA, FHIR

• Integrate tool
  – Menu item from HIE
  – Sustainability
    • Vendor review, practice implementation
    • IAPD to user fees

February 2, 2016
Questions?
eCQM Planning Sequence – Where to start?

1. Strategic Planning
2. Implementation Planning
3. Implementation
4. Sustainability
5. Expand CQMs
6. Monitor, Improve and Optimize

Advanced quality improvement ecosystem to collect, share, and use data
eCQM Strategic Planning

• Assess the state’s current eCQM capacity
• Identify priority needs and uses for eCQMs
• Assess state HIT governance
• Align measures across programs and stakeholders
  – Marco-alignment
  – Micro-alignment
• Assess technical capability of state technical resources
eCQM Strategic Planning Considerations

Assess the current CQM capacity

• How is the state currently assessing Quality?
• Does the state have a quality measure network at state, regional, local levels?

Identify Priority Use Cases

• What are current and future priority uses? See Uses and Benefits in Appendix
• What is the value proposition for all stakeholder groups? (payers, purchasers, providers, patients)
• What are the barriers and needs for stakeholders?
• Align around a model, common objectives, and common benefits

Assess Current HIT Governance

• Does the current HIT governance model support quality measure use cases?
• Who are the key public and private stakeholders state’s needed to support priority use cases and objectives?
• Can workgroups be created or leveraged to support measure alignment, technical details, and align to broader health reform governance?
eCQM Strategic Planning Considerations (con’t)

**Program alignment** - Is there a common program to build from or align with? (e.g., CPCI → SIM → LAN → MACRA)

**Macro alignment** - Identify common measures to start building capabilities to pave the road for more measures (e.g., NQF 0018 – the Million Hearts Hypertension measure)

**Micro alignment** - How close are data specifications aligned to “gold standard” specifications

- Consider different populations (e.g., Primary Care, Pediatrics, Mental Health, Substance Use)

**Shared technical services** - Does the state have the common, shared services (e.g., Master Patient Index) to support more advanced clinical quality measures?

- Are there opportunities to identify common, shared services?

**Data Intermediaries** - Can you build from data intermediaries around the State?

- Are the available CQM technologies currently operational, in development, can be expanded from current resources, or planned for future development?

**Data availability** – what data is currently available?
Micro-alignment of measures

- **Micro alignment** - thinking carefully about how close actual data specifications for the measure are aligned with the “gold standard” specifications
- 2013 Buying Value Coalition measure modification findings
  - Most state programs modify measures - 23% of the identifiable standardized measures were modified (237/1051)
  - 40 of the 48 measure sets modified at least one measure
  - Two programs modified *every*, single measure
  - Six programs modified at least 50% of their measures
- **Toolkit**– Buying Value Coalition toolkit can assist states build measure set
  - [Online Measure Selection Toolkit](http://www.buyingvalue.org/resources/)
eCQM Implementation Planning

• **Policy** – Assess business and regulatory policies to accelerate CQM data availability and reporting

• **Program** – Identify state and private programs that could benefit from CQM capabilities

• **Technology** – Assess current and planned technical capabilities
  – Identify primary data sources
  – Identify data intermediaries
  – Identify data and technology gaps
eCQM Implementation Planning Considerations

Assess Business and Regulatory Policies

- What authorities are available to accelerate the state’s CQM capacity?
- Does procurement have to be planned?
- What is the decision governance structure?
- What data use agreements need to be examined and modified to support CQM?

Identify State and Private Programs

- What are current programs to use as demonstration project?
- What are the business, functional, and technical requirements for an RFP?
- Consider different measure for all populations (e.g., Primary Care, Pediatrics, Mental Health, Substance Use)
- Identify key project management oversight

Assess Current and Planned Technology

- What are available CQM data sources?
- What measure data specifications have been modified?
- What data intermediaries are available?
- What data intermediary functionalities are operational, in development, or possible to be extended?
- What are data format strategies?
eCQM Implementation

• Identify a demonstration program with aligned measures to test eCQM data, calculation and reporting
• Identify key project management tasks - roles and responsibilities, escalation process
• Identify risk and mitigation strategy - key barriers and issues to eCQM data acquisition, calculation, and reporting
• Identify key infrastructure to be developed
• Identify key milestones for practices and partners to reach
• Align timelines across technical development and implementation with program timelines
# eCQM Continuum

## eCQM Maturity Models

<table>
<thead>
<tr>
<th>Current</th>
<th>Goals</th>
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</thead>
<tbody>
<tr>
<td><strong>Data Source and Measurement Method</strong></td>
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<tr>
<td>HEDIS &amp; Chart Review</td>
<td>Claims Only Data</td>
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<td><strong>Units of Measure</strong></td>
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<td>Organization</td>
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<td>10%</td>
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<td>Numerator Denominator</td>
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<td><strong>Reporting Format</strong></td>
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<tr>
<td>Numerator Denominator</td>
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<td>Annual</td>
<td>Quarterly</td>
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</table>
eCQM Dependencies and Functions

Health IT Infrastructure to create a state wide (or regional) Shared Services to support payment reform models

Shared Services
Gain efficiency through reusable shared technical services
Monitor and Improve eCQM Capabilities

• Test, test, test
  – TACOMA framework

• Validate results

• Continue to monitor EHR vendor capabilities

• Implement and monitor data quality programs
  – Data sourcing
  – Data calculation
  – Data reporting
Expanding eCQM Capabilities

- Expand programs participating in eCQM implementation
- Identify additional measures to be tested and reported
- Micro align new measure data specifications
- Identify additional data sources
- Create roadmap for expanding eCQM capabilities (e.g., public reporting, population health measurement)
- Go back to implementation planning step
eCQM Sustainability

• Funding mechanisms
  – 90-10 HITECH/HIE Advanced Planning Documents

• Policy levers
  – ONC State HIT Policy Compendium
  – Medicaid contracts
  – Multi-payer collaboratives
The Significant Lack of Alignment Across State and Regional Health Measure Sets:
An Analysis of 48 State and Regional Measure Sets, Presentation
Purpose

- **Goal:** Paint a picture of the measures landscape across states and regions to inform development of the emerging Buying Value measure set.

- **Process:** Identify and collect 48 measure sets used by 25 states for a range of purposes and conduct a multi-pronged analysis:
  - Provide basic summary information to describe the 48 measure sets
  - Provide an overview of the measures included in the 48 measure sets
  - Analyze the non-NQF endorsed measures
  - Analyze the measures by measure set type
  - Analyze the measures by measure set purpose
  - Analyze the measures by domain/clinical areas
  - Assess the extent of alignment within the states of CA and MA
Methodology

- We used a convenience sample of measure sets from states, by requesting assistance from our contacts in states and by:
  - Obtaining sets through state websites:
    - Patient-Centered Medical Home (PCMH) projects
    - Accountable Care Organization (ACO) projects
    - CMS’ Comprehensive Primary Care Initiative
  - Soliciting sets from the Buying Value measures work group
- We also included measure sets from specific regional collaboratives.
- We have not surveyed every state, nor have we captured all of the sets used by the studied states.
- We did not include any hospital measures sets in our analysis.
  - Excluded 53 hospital measures from the analysis
Agenda/ Findings:

1. Many measures in use today
2. Little alignment across measure sets
3. Non-alignment persists despite preference for standard measures
4. Regardless of how we cut the data, the programs were not aligned
5. Most programs modify measures
6. Many programs create homegrown measures
7. Most homegrown measures are not innovative
8. Conclusions and recommendations
Finding #1: Many state/regional performance measures for providers are in use today

- In total, we identified 1367 measures across the 48 measure sets
  - This is counting the measures as NQF counts them, or if the measure was not NQF-endorsed, as the program counts them

- We identified 509 distinct measures
  - If a measure showed up in multiple measure sets, we only counted it once
  - If a program used a measure multiple times (i.e., variations on a theme) we also only counted it once

- We excluded 53 additional hospital measures from the analysis.
Programs use measures across all of the domains:

- Treatment and secondary prevention: 28%
- Health and well-being: 14%
- Person-centered: 11%
- Safety: 19%
- Comm & care coordination: 5%
- Access, affordability & inappropriate care: 11%
- Utilization: 8%

Distinct measures by domain: n = 509
Most implemented measures are for adults

- But there does not appear to be a deficiency in the number of measures that could be used in the pediatric or the 65+ population.
Finding #2: Little alignment across measure sets

- Programs have very few measures in common or “sharing” across the measure sets
- Of the 1367 measures, 509 were “distinct” measures
- Only 20% of these distinct measures were used by more than one program

* By “shared,” we mean that the programs have measures in common with one another, and not that programs are working together.
80% of Measures Appear in Only One of the 48 State Measure Sets

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* By “shared,” we mean that the programs have measures in common with one another, and not that programs are working together.
How often are the “shared measures” shared?

Not that often...

- Measures not shared: 80%
- Shared measures: 20%
- 6-10 sets, 4% (21 measures)
- 3-5 sets, 4% (20 measures)
- 16-30 sets, 4% (19 measures)
- 2 sets, 5% (28 measures)

Most measures are not shared.

Only 19 measures were shared by at least 1/3 (16+) of the measure sets.
Finding #3: Non-alignment persists despite preference for standard measures

Defining Terms

**Standard**: measures from a known source (e.g., NCQA, AHRQ)

**Modified**: standard measures with a change to the traditional specifications

**Homegrown**: measures that were indicated on the source document as having been created by the developer of the measure set

**Undetermined**: measures that were not indicated as “homegrown”, but for which the source could not be identified

**Other**: a measure bundle or composite
Most measures used are standard NQF-endorsed measures and/or from HEDIS.

Note: the standard measures described here include those standard measures that have been modified.
But a much smaller percentage of the distinct measures are NQF-endorsed and/or from HEDIS.
Programs are selecting different subsets of standard measures

- While the programs may be primarily using standard, NQF-endorsed measures, they are **not selecting the same** standard measures
- Not one measure was used by every program
  - Breast Cancer Screening is the most frequently used measure and it is used by only 30 of the programs (63%)
Finding #4: Regardless of how we cut the data, the programs were not aligned

- We conducted multiple analyses and found non-alignment persisted across:
  - Program types
  - Program purposes
  - Domains, and
  - A review of sets within CA and MA

- The only program type that showed alignment was the Medicaid MCOs
  - 62% of their measures were shared
  - Only 3 measures out of 42 measures were not HEDIS measures

- California also showed more alignment than usual
  - This may be due to state efforts or to the fact that three of the seven CA measure sets were created by the same entity.
Finding #5: Even shared measures aren’t always the same - the problem of modification!

- Most state programs modify measures
- 23% of the identifiable standardized measures were modified (237/1051)
- 40 of the 48 measure sets modified at least one measure
- Two programs modified every single measure
  1. RI PCMH
  2. UT Department of Health
- Six programs modified at least 50% of their measures
  1. CA Medi-Cal Managed Care Specialty Plans (67%)
  2. WA PCMH (67%)
  3. MA PCMH (56%)
  4. PA Chronic Care Initiative (56%)
  5. OR Coordinated Care Organizations (53%)
  6. WI Regional Collaborative (51%)
Why do organizations modify measures?

- To tailor the measure to a specific program
  - If a program is focused on a subpopulation, then the program may alter the measure to apply it to the population of interest

- To facilitate implementation
  - Due to limitations in data capabilities, programs may choose to modify the source of measures so they can collect them without changing IT systems

- To obtain buy-in and consensus on a measure
  - Sometimes providers have strong opinions about the particular CPT codes that should be included in a measure in order to make it more consistent with their experiences. In order to get consensus on the measure, the organization may agree to modify the specifications.
  - Sometimes providers are anxious about being evaluated on particular measures and request changes that they believe reflect best practice
Finding #6: Many programs create homegrown measures

What are “homegrown” measures?

Homegrown measures are measures that were indicated on the source document as having been created by the developer of the measure set.

If a measure was not clearly attributed to the developer, the source was considered to be “undetermined” rather than “homegrown.”
40% of the programs created at least one homegrown measure

Homegrown measures by type

- Measures that are specific to one program: 41%
- Measures that attempt to fill a measurement gap: 35%
- Unclear as to why the program used a homegrown measure: 14%
- Provider choice measures: 10%

n = 198
Do homegrown measures represent innovation?

- “Innovative” measures are measures that are not NQF-endorsed and:
  a. address an important health care concern that is not addressed in most state measure sets, e.g.:
     - Care coordination
     - Care management/ transitions
     - Cost
     - End-of-life care/ hospice/ palliative care
  b. address an issue/condition for which few measures are commonly employed, e.g.:
     - Dementia
     - Dental care
     - Depression
     - Maternal health
     - Patient self-management
     - Procedure-specific quality concerns
     - Social determinants of health
     - Mental health
     - Pain
     - Quality of life
     - Substance abuse
Innovative measures

- We identified 76 innovative measures across 50 measure sets:
  - 48 measures sets from the state measure set analysis
  - 2 additional regional collaborative measure sets
    - Minnesota AF4Q
    - Oregon AF4Q
- 20 of the measure sets included at least one innovative measure:
  - 35% of MA PCMH measures were innovative (17)
  - 31% of MN SQRMS measures were innovative (4)
  - 25% of MA MBHP measures were innovative (2)
  - 16% of TX Delivery System Reform Incentive Program measures were innovative (17)
- Some of the innovative measures may simply be “measure concepts” that are not ready for implementation.
Finding #7: Most homegrown measures are not innovative

But most innovative measures are homegrown

Note: The numbers on this slide vary slightly from the others since we have added four additional homegrown innovative measures from MN AF4Q.
Examples of innovative measures

- Percent of hospitalized patients who have clinical, telephonic or face-to-face follow-up interaction with the care team within 2 days of discharge during the measurement month (MA PCMH)
- Patient visits that occur with the selected provider/care team (ID PCMH)
- Cost savings from improved chronic care coordination and management (IA dually eligible program)
- Decrease in mental health admissions and readmissions to criminal justice settings such as jails or prisons (TX DSRIP)
- Mental and physical health assessment within 60 days for children in DHS custody (OR CCO)
There appears to be a need for new standard measures in certain areas.
Summary of findings

- There are many, many measures in use today.

- Current state and regional measure sets are not aligned.

- Non-alignment persists despite the tendency to use standard, NQF-endorsed and/or HEDIS measures.

- With few exceptions, regardless of how we analyzed the data, the programs’ measures were not aligned.
  - With the exception of the Medicaid MCO programs, we found this lack of alignment existed across domains, and programs of the same type or for the same purpose.
  - We also found that California has more alignment. This may be due to our sample or the work the state has done to align measures.
While many programs use measures from the same domains, they are not selecting the same measures within these domains.

- This suggests that simply specifying the domains from which programs should select measures will not facilitate measure set alignment.

Even when the measures are “the same,” the programs often modify the traditional specifications for the standard measures.
Many programs create their own “homegrown” measures.
- Some of these may be measure concepts, rather than measures that are ready to be implemented

Unfortunately most of these homegrown measures do not represent true innovation in the measures space.

There appears to be a need for new standardized measures in the areas of self-management, cost, and care management and coordination.
Conclusions

- **Bottom line:** Measures sets appear to be developed independently without an eye towards alignment with other sets.

- The diversity in measures allows states and regions interested in creating measure sets to select measures that they believe best meet their local needs. Even the few who seek to create alignment struggle due to a paucity of tools to facilitate such alignment.

- The result is “measure chaos” for providers subject to multiple measure sets and related accountability expectations and performance incentives. Mixed signals make it difficult for providers to focus their quality improvement efforts.
This is only the beginning…

- We anticipate that as states and health systems become more sophisticated in their use of electronic health records and health information exchanges, there will be more opportunities to easily collect clinical data-based measures and thus increase selection of those types of measures over the traditional claims-based measures.

- Combining this shifting landscape with the national movement to increase the number of providers that are paid for value rather than volume suggests that the proliferation of new measures and new measure sets is only in its infancy.
A call to action

- In the absence of a fundamental shift in the way in which new measure sets are created, we should prepare to see the problem of unaligned measure sets grow significantly.
Recommendations

1. Launch a campaign to raise awareness about the current lack of alignment across measure sets and the need for a national measures framework.
   – help states and regions interested in creating measure sets understand why lack of alignment is problematic

2. Communicate with measure stewards to indicate to them when their measures have been frequently modified and why this is problematic.
   – in particular in the cases in which additional detail has been added, removed or changed

3. Develop an interactive database of recommended measures to establish a national measures framework.
   – consisting primarily of the standardized measures that are used most frequently for each population and domain
   – selecting and/or defining measures for the areas in which there is currently a paucity of standardized measures
4. Provide technical assistance to states to help them select high-quality measures that both meet their needs and encourage alignment across programs in their region and market. This assistance could include:

- a measures hotline
- learning collaboratives and online question boards, blogs and/or listservs
- benchmarking resources for the recommended measures selected for inclusion in the interactive measures tool.

5. Acknowledge the areas where measure alignment is potentially not feasible or desirable.

- different populations of focus
- program-specific measures
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Measure sets by state

- Reviewed 48 measure sets used by 25 states.
- Intentionally gave a closer look at two states: CA and MA.

1. AR
2. CA (7)
3. CO
4. FL
5. IA (2)
6. ID
7. IL
8. LA
9. MA (8)
10. MD
11. ME (2)
12. MI
13. MN (2)
14. MO (3)
15. MT
16. NY
17. OH
18. OK
19. OR
20. PA (4)
21. RI
22. TX
23. UT (2)
24. WA
25. WI

Note: If we reviewed more than one measure set from a state, the number of sets included in the analysis is noted above.
Program types

- **Note**: these categories are meant to be mutually exclusive. Each measure set was only included in one category.

- **ACO**: Measure sets used by states to evaluate Accountable Care Organizations (organizations of providers that agree to be accountable for clinical care and cost for a specific attributed population.)

- **Alignment Initiative**: Measure sets created by statewide initiatives in an attempt to align the various measures being used throughout the state by various payers or entities.

- **Commercial Plans**: Measure sets used by states to evaluate insurers serving commercial members.

- **Duals**: Measure sets used by state Medicaid agencies in programs serving beneficiaries who are dually eligible for Medicare and Medicaid.

- **Exchange**: Measure sets used to assess plan performance in a state-operated marketplace for individuals buying health insurance coverage.
Program types (cont’d)

- **Medicaid**: Measure sets used by states to evaluate Medicaid agency performance.
- **Medicaid MCO**: Measure sets used by state Medicaid agencies to assess performance of their contracted managed care organizations.
- **Medicaid BH MCO**: Measure sets used by state Medicaid agencies to assess performance of their contracted behavioral health managed care organizations.
- **PCMH**: Measure sets used by patient-centered medical home initiatives.
- **Other Provider**: Measure sets used by states to assess performance at the provider level, but not for assessing ACO, PCMH or Health Home initiatives.
- **Regional Collaborative**: A coalition of organizations coordinating measurement efforts at a regional level, often with the purpose of supporting health and health care improvement in the geographic area.
Measure sets by program type
Measure sets by purpose

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Count</th>
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<tbody>
<tr>
<td>Reporting</td>
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<tr>
<td>Payment</td>
<td>19</td>
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<td>Reporting and Other</td>
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</tr>
<tr>
<td>Alignment</td>
<td>2</td>
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</table>

**Defining Terms**

**Reporting:** measure sets used for performance reporting, this reporting may be public or may be for internal use only

**Payment:** measure sets used to distribute payments of some kind (e.g., pay-for-performance, shared savings, etc.)

**Reporting and Other:** measure sets used for reporting and an additional non-payment purpose, such as tiering providers or contract management

**Alignment:** measure sets that are the result of state initiatives to establish a core measure set for the state
Measure sets ranged significantly in size

Note: This is counting the measures as NQF counts them (or if the measure was not NQF-endorsed, as the program counted them).
### Categories of 19 most frequently used measures

<table>
<thead>
<tr>
<th>7 Diabetes Care</th>
<th>6 Preventative Care</th>
<th>4 Other Chronic Conditions</th>
<th>1 Mental Health/Substance Abuse</th>
<th>1 Patient Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Comprehensive Diabetes Care (CDC): LDL-C Control &lt;100 mg/dL</td>
<td>• Breast Cancer Screening</td>
<td>• Controlling High Blood Pressure</td>
<td>• Follow-up after Hospitalization for Mental Illness</td>
<td>• CAHPS Surveys (various versions)</td>
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<tr>
<td>• CDC: Hemoglobin A1c (HbA1c) Control (&lt;8.0%)</td>
<td>• Cervical Cancer Screening</td>
<td>• Use of Appropriate Medications for People with Asthma</td>
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<tr>
<td>• CDC: Medical Attention for Nephropathy</td>
<td>• Childhood Immunization Status</td>
<td>• Cardiovascular Disease: Blood Pressure Management &lt;140/90 mmHg</td>
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<tr>
<td>• CDC: HbA1c Testing</td>
<td>• Colorectal Cancer Screening</td>
<td>• Cholesterol Management for Patients with Cardiovascular Conditions</td>
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</tr>
<tr>
<td>• CDC: HbA1c Poor Control (&gt;9.0%)</td>
<td>• Weight Assessment and Counseling for Children and Adolescents</td>
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<tr>
<td>• CDC: LDL-C Screening</td>
<td>• Tobacco Use: Screening &amp; Cessation Intervention</td>
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<td></td>
<td></td>
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<tr>
<td>• CDC: Eye Exam</td>
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### Overview of measure sets included in analysis

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<th>State</th>
<th>Name</th>
<th>Type</th>
<th># of measures</th>
<th>NQF-endorsed</th>
<th>Modified</th>
<th>Homegrown</th>
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<td>Arkansas Medicaid</td>
<td>Medicaid</td>
<td>14</td>
<td>79%</td>
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<td>CA Medi-Cal Managed Care Division</td>
<td>Medicaid</td>
<td>22</td>
<td>82%</td>
<td>45%</td>
<td>5%</td>
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<td>CA</td>
<td>CA Medi-Cal Managed Care Division: Specialty Plans</td>
<td>Medicaid</td>
<td>6</td>
<td>50%</td>
<td>67%</td>
<td>33%</td>
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<td>Office of the Patient Advocate (HMO)</td>
<td>Commercial Plans</td>
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<td>74%</td>
<td>18%</td>
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<td>CA</td>
<td>Office of the Patient Advocate (Medical Group)</td>
<td>Commercial Plans</td>
<td>25</td>
<td>68%</td>
<td>4%</td>
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</tr>
<tr>
<td>CA</td>
<td>Office of the Patient Advocate (PPO)</td>
<td>Other Provider</td>
<td>44</td>
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</tr>
<tr>
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</tr>
<tr>
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</tr>
<tr>
<td>CA</td>
<td>CALPERS</td>
<td>Commercial Plans for Public Employees</td>
<td>33</td>
<td>85%</td>
<td>6%</td>
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</tr>
<tr>
<td>CA</td>
<td>Quality and Network Management –</td>
<td>Exchange</td>
<td>51</td>
<td>84%</td>
<td>6%</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>Quality Reporting System (QRS)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CO</td>
<td>Medicaid's Accountable Care Collaborative</td>
<td>ACO with Primary Care Medical Provider</td>
<td>3</td>
<td>None</td>
<td>33%</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>Medicaid MCO Procurement Measures</td>
<td>Medicaid MCO</td>
<td>8</td>
<td>75%</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>FL</td>
<td>IA Duals</td>
<td>Duals</td>
<td>31</td>
<td>65%</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>IA</td>
<td>IA Health Homes</td>
<td>Health Home</td>
<td>12</td>
<td>92%</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>State</td>
<td>Name</td>
<td>Type</td>
<td># of measures</td>
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</tr>
<tr>
<td>-------</td>
<td>------------------------------------------------</td>
<td>---------------------</td>
<td>---------------</td>
<td>--------------</td>
<td>----------</td>
<td>-----------</td>
</tr>
<tr>
<td>ID</td>
<td>Idaho Medical Home Collaborative</td>
<td>PCMH</td>
<td>17</td>
<td>59%</td>
<td>12%</td>
<td>None</td>
</tr>
<tr>
<td>IL</td>
<td>IL Medicaid MCO</td>
<td>Medicaid MCO</td>
<td>42</td>
<td>88%</td>
<td>12%</td>
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</tr>
<tr>
<td>LA</td>
<td>Coordinated Care Networks</td>
<td>Medicaid</td>
<td>35</td>
<td>71%</td>
<td>6%</td>
<td>9%</td>
</tr>
<tr>
<td>MA</td>
<td>MA Connector</td>
<td>Exchange</td>
<td>9</td>
<td>67%</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>MA</td>
<td>MA Duals Project</td>
<td>Duals</td>
<td>42</td>
<td>86%</td>
<td>None</td>
<td>5%</td>
</tr>
<tr>
<td>MA</td>
<td>MA GIC</td>
<td>Other Provider</td>
<td>99</td>
<td>60%</td>
<td>16%</td>
<td>None</td>
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## Overview of measure sets included in analysis (cont’d)

<table>
<thead>
<tr>
<th>State</th>
<th>Name</th>
<th>Type</th>
<th># of measures</th>
<th>NQF-endorsed</th>
<th>Modified</th>
<th>Homegrown</th>
</tr>
</thead>
<tbody>
<tr>
<td>MA</td>
<td>MA MBHP</td>
<td>Behavioral Health MCO P4P</td>
<td>8</td>
<td>38%</td>
<td>13%</td>
<td>38%</td>
</tr>
<tr>
<td>MA</td>
<td>MA MMCO</td>
<td>Medicaid</td>
<td>19</td>
<td>79%</td>
<td>11%</td>
<td>None</td>
</tr>
<tr>
<td>MA</td>
<td>MA PCPRI</td>
<td>Other Provider</td>
<td>26</td>
<td>96%</td>
<td>4%</td>
<td>None</td>
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<tr>
<td>MA</td>
<td>PCMH</td>
<td>PCMH</td>
<td>48</td>
<td>52%</td>
<td>56%</td>
<td>44%</td>
</tr>
<tr>
<td>MA</td>
<td>Statewide Quality Advisory Committee (SQAC)</td>
<td>Alignment Initiative</td>
<td>83</td>
<td>78%</td>
<td>7%</td>
<td>1%</td>
</tr>
<tr>
<td>MD</td>
<td>Maryland Multi-Payer Pilot Program (MMPP)</td>
<td>PCMH</td>
<td>20</td>
<td>90%</td>
<td>5%</td>
<td>None</td>
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## Overview of measure sets included in analysis (cont’d)

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<tr>
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<th>Homegrown</th>
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</thead>
<tbody>
<tr>
<td>ME</td>
<td>Maine Health Management Coalition</td>
<td>Regional Collaborative</td>
<td>28</td>
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<td>43%</td>
<td>None</td>
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<tr>
<td>ME</td>
<td>Maine's PCMH Project</td>
<td>PCMH</td>
<td>29</td>
<td>79%</td>
<td>24%</td>
<td>7%</td>
</tr>
<tr>
<td>MI</td>
<td>The Michigan Primary Care Transformation Project (MiPCT)</td>
<td>PCMH</td>
<td>36</td>
<td>61%</td>
<td>19%</td>
<td>17%</td>
</tr>
<tr>
<td>MN</td>
<td>MN AF4Q</td>
<td>Innovative measures only</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>MN</td>
<td>MN Dept Health (Medicaid) Health Care Home</td>
<td>PCMH</td>
<td>7</td>
<td>86%</td>
<td>None</td>
<td>None</td>
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<tr>
<td>MN</td>
<td>MN SQRMS: MN Statewide Quality Reporting and Measurement System (SQRMS)</td>
<td>Alignment Initiative</td>
<td>13</td>
<td>46%</td>
<td>15%</td>
<td>8%</td>
</tr>
<tr>
<td>State</td>
<td>Name</td>
<td>Type</td>
<td># of measures</td>
<td>NQF-endorsed</td>
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</tr>
<tr>
<td>MO</td>
<td>MO BHMCO measures</td>
<td>Medicaid BH MCO</td>
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<td>94%</td>
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<td>MO</td>
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<td>41%</td>
<td>17%</td>
<td>51%</td>
</tr>
<tr>
<td>MO</td>
<td>Missouri Medical Home Collaborative (MMHC)</td>
<td>PCMH</td>
<td>9</td>
<td>89%</td>
<td>33%</td>
<td>11%</td>
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<tr>
<td>MT</td>
<td>Montana Medical Home Advisory Council</td>
<td>PCMH</td>
<td>13</td>
<td>92%</td>
<td>8%</td>
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<tr>
<td>NY</td>
<td>Medicaid Redesign Initiative</td>
<td>Medicaid</td>
<td>38</td>
<td>55%</td>
<td>24%</td>
<td>24%</td>
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<tr>
<td>OH</td>
<td>SW OH CPCI</td>
<td>PCMH</td>
<td>21</td>
<td>86%</td>
<td>5%</td>
<td>None</td>
</tr>
<tr>
<td>State</td>
<td>Name</td>
<td>Type</td>
<td># of measures</td>
<td>NQF- endorsed</td>
<td>Modified</td>
<td>Homegrown</td>
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<td>---------------</td>
<td>---------------</td>
<td>----------</td>
<td>-----------</td>
</tr>
<tr>
<td>OK</td>
<td>OK Medicaid Soonercare</td>
<td>PCMH</td>
<td>17</td>
<td>65%</td>
<td>18%</td>
<td>None</td>
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<tr>
<td>OR</td>
<td>CCO's Incentive Measures Set</td>
<td>ACO</td>
<td>17</td>
<td>65%</td>
<td>53%</td>
<td>24%</td>
</tr>
<tr>
<td>PA</td>
<td>Chronic Care Initiative</td>
<td>PCMH</td>
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<td>47%</td>
<td>56%</td>
<td>15%</td>
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<tr>
<td>PA</td>
<td>Health Home Care set</td>
<td>Health Home</td>
<td>8</td>
<td>75%</td>
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<td>None</td>
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<tr>
<td>PA</td>
<td>MCO/Vendor P4P</td>
<td>MCO P4P</td>
<td>14</td>
<td>64%</td>
<td>29%</td>
<td>None</td>
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<tr>
<td>PA</td>
<td>Provider P4P</td>
<td>Other Provider</td>
<td>13</td>
<td>62%</td>
<td>31%</td>
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# Overview of measure sets included in analysis (cont’d)

<table>
<thead>
<tr>
<th>State</th>
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<th>Modified</th>
<th>Homegrown</th>
</tr>
</thead>
<tbody>
<tr>
<td>RI</td>
<td>RI PCMH (CSI)</td>
<td>PCMH</td>
<td>10</td>
<td>80%</td>
<td>100%</td>
<td>None</td>
</tr>
<tr>
<td>TX</td>
<td>TX Delivery System Reform Incentive Program</td>
<td>Other Provider</td>
<td>108</td>
<td>35%</td>
<td>2%</td>
<td>30%</td>
</tr>
<tr>
<td>UT</td>
<td>UT Dept. of Health</td>
<td>Other Provider</td>
<td>5</td>
<td>60%</td>
<td>100%</td>
<td>None</td>
</tr>
<tr>
<td>UT</td>
<td>Health Insight Utah</td>
<td>Regional Collaborative</td>
<td>10</td>
<td>100%</td>
<td>None</td>
<td>None</td>
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<tr>
<td>VT</td>
<td>VT ACO Measures Work Group</td>
<td>ACO</td>
<td>37</td>
<td>54%</td>
<td>11%</td>
<td>None</td>
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<td>WA</td>
<td>Multi-payer PCMH</td>
<td>PCMH</td>
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<td>67%</td>
<td>67%</td>
<td>None</td>
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<tr>
<td>WI</td>
<td>WI Regional Collaborative</td>
<td>Regional Collaborative</td>
<td>10</td>
<td>80%</td>
<td>100%</td>
<td>None</td>
</tr>
</tbody>
</table>
Appendix
Appendix: Electronic Clinical Quality Measures (eCQMs) Criteria

• **2015 Certification continues with 2014 edition (MU2) eCQM certification approach**

• **What do we certify?**
  – Modular certification for:
    • Capture and export of quality measure data (c)(1)
    • Import and calculate quality measures (c)(2)
    • Report quality measures (c)(3) as aggregate data by provider and/or individual patient level data
  – Filter (c)(4) - new optional criteria, not required by MU.

• **Changes from 2014 (MU2)**
  – Enhanced rigor of testing, require ability for on demand export of quality measures by providers, all vendors must be certified to export patient level data.
  – Filter (c)(4) - Ability to filter eCQM results by demographics, payer, medical condition, practice site.

• **State Implications**
  – Re-affirmed QRDA (quality reporting data architecture) as the standard for eCQM.
  – CMS is requiring all providers to submit eCQM data to CMS in 2018.
  – States could require filter (c4) in 2018 (for 2019 data submission) if there are needs to filter data by practice site, payer or demographics.
  – States can currently require patient-level or aggregate data submission—this will continue.
# Appendix: eCQM Uses and Benefits

<table>
<thead>
<tr>
<th>Uses</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Clinical Quality Calculation and Measurement</strong> improving quality of care delivery</td>
<td>• Produces better value through higher quality and lower cost of care</td>
</tr>
<tr>
<td><strong>Measure for Payment – Pay for Value</strong> financial incentives for health care providers</td>
<td>• Rewards providers for lower cost and better outcomes</td>
</tr>
<tr>
<td><strong>Public Reporting</strong> for cost and quality transparency</td>
<td>• Provides transparency on quality of care supporting better decisions by consumers and purchasers</td>
</tr>
<tr>
<td><strong>Reuse collected data</strong> for clinical action and population health measurement</td>
<td>• Collect data once and reuse for clinical quality measurement and clinical action</td>
</tr>
<tr>
<td><strong>Payment reform design, implementation, program monitoring and evaluation</strong></td>
<td>• Assesses impact of value-based payment reform programs to build more effective programs using available quality measures</td>
</tr>
<tr>
<td><strong>Decision support and gap analysis</strong> of patient cohort</td>
<td>• Cohort identification and understanding of controlled and uncontrolled patient cohorts</td>
</tr>
</tbody>
</table>
Appendix: Quality Measurement Data Intermediary

Dependencies

- **Governance**
  - Decentralized – services provided separately and by separate organizations
  - Central – one data intermediary providing services (e.g., SDE, HIE, state)
  - Coordinated – one or more data intermediaries with virtual trust community and technical services

- **Identity Management** supporting cross organization and provider calculation
Appendix: Quality Measurement Data Intermediary

**Functional Requirements**

- **Sourcing** – Obtaining data from EHRs for quality reporting or other uses
- **Cleansing and management** – Normalizing, scrubbing or cleaning data for reporting purposes
- **Calculation** – calculate eCQM results based on the criteria defined by an eMeasure specification
- **Consistent formatting** – produce a corresponding QRDA Category III report
- **Optional functions** – benchmarking and feedback reports
Appendix: Quality Measurement Data Intermediary Examples

- Data warehouse
- State Level Registry (e.g., Medicaid eCQM tool)*
- Performance measurement system vendor
- Quality registry (e.g., PCORI)
- State designated entity
- Health information exchange
  - State level or regional HIE
  - Federated – data is not stored at a central location but pulled from collection of clinical data repositories located remotely
  - Centralized – clinical data repository storing all data in single format - and transforming into different format
  - Hybrid – stores some data but queries data from contributing data systems
  - Private – act as central HIE under single, private governing
- Integrated data intermediaries aggregating multiple sites
- Options
  - Smaller states may consider a state owned registry for full solution – Wyoming
Appendix: Illustration - CQM Data Intermediaries
# Appendix – Data Sourcing: Quality Reporting, C-CDA, and other available data

<table>
<thead>
<tr>
<th>Reporting Format</th>
</tr>
</thead>
<tbody>
<tr>
<td>QRDA Cat I</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Intended Use</th>
<th>Quality reporting format for consistent, high reliable measurement for payment adjustment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perspective</td>
<td>Ambulatory/hospital oriented: Aims to capture information on provider/hospital behaviors and processes and their impact on patient care and outcomes</td>
</tr>
<tr>
<td>Function</td>
<td>Used reporting format eCQM data between systems for quality measurement and reporting initiative</td>
</tr>
<tr>
<td>Available Data</td>
<td>QRDA I Is limited to data required for eCQM calculation</td>
</tr>
<tr>
<td>Structured Data</td>
<td>Enforces structured data capture improving interoperability and comparisons</td>
</tr>
</tbody>
</table>
Appendix – Data Sourcing: Quality Reporting, C-CDA, and other available data

<table>
<thead>
<tr>
<th>Data Sourcing</th>
<th>C-CDA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Intended Use</strong></td>
<td><strong>Data sourcing format</strong> developed to acquire and provide for a longitudinal view of patient’s health information to support care coordination</td>
</tr>
<tr>
<td><strong>Perspective</strong></td>
<td><strong>Patient oriented:</strong> Aims to capture information to provide a longitudinal view of a patient’s health and healthcare history</td>
</tr>
<tr>
<td><strong>Function</strong></td>
<td>Primary function is to support care coordination but can be used for quality reporting</td>
</tr>
<tr>
<td><strong>Available Data</strong></td>
<td>C-CDA includes additional data components that can support multiple functions</td>
</tr>
<tr>
<td><strong>Structured Data</strong></td>
<td>May require additional data quality efforts and manipulation for QRDA reporting</td>
</tr>
</tbody>
</table>
Appendix – Data Sourcing: Quality Reporting, C-CDA, and other available data

<table>
<thead>
<tr>
<th>Other data available for augmenting quality reporting data (e.g., claims, lab reporting, eRx)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Other data format example – ADTs</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Intended Use</th>
<th>ADT messages are important in HL7 communications because they provide vital data about the patient and why the message is being sent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perspective</td>
<td>Event oriented: Important patient data, event, and determine when and where message must go based on triggering event</td>
</tr>
<tr>
<td>Function</td>
<td>To carry patient demographic info for HL7 communications but also provide important trigger event information, such as patient admit, discharge, transfer, registration</td>
</tr>
<tr>
<td>Available Data</td>
<td>ADTs provide vital data about the patient and why the message is being sent</td>
</tr>
<tr>
<td>Structured Data</td>
<td>Supports structured data for trigger events and may require additional data quality efforts</td>
</tr>
</tbody>
</table>
Appendix: Quality Measurement Data Intermediary

Additional Functions

- Notification services
- Provider feedback report
- Public quality transparency tools