Maryland HSCRC
Performance Measurement Workgroup
June 20, 2014

Empowering Health Systems to Improve Performance Through Effective Use of Information Technology

www.Medisolv.com
## CMS Quality Reporting Programs

<table>
<thead>
<tr>
<th>Facility Quality</th>
<th>Ambulatory Physician Quality</th>
<th>“Payment Model” Quality</th>
<th>“Population” Quality *</th>
</tr>
</thead>
<tbody>
<tr>
<td>IQR / OQR IRF QRP LTCHQR PCHQR IPFQR ASCQR</td>
<td>PQRS</td>
<td>Medicare Shared Savings Program</td>
<td>Medicaid Adult &amp; CHIPRA Quality Reporting</td>
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<tr>
<td>HAC / HAI Readmission</td>
<td>eRx Quality Reporting</td>
<td>Hospital Value based Purchasing (VBP)</td>
<td>Health Information Exchange Reporting</td>
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<tr>
<td>EHR Incentive Program - EH/CAH</td>
<td>EHR Incentive Program - EP</td>
<td></td>
<td>Medicare Part C &amp; D * Future</td>
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</tbody>
</table>
## IQR & EHR Incentive Program Alignment

### Proposed Timelines

**Voluntary eCQM* Reporting**

<table>
<thead>
<tr>
<th>CY</th>
<th>EHR Incentive Program Reporting Requirements*</th>
<th>Hospital IQR Program Reporting Requirements</th>
<th>Submission Period**</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015 Reporting Period</td>
<td></td>
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<tr>
<td>Q1</td>
<td>January 1 – March 31, 2015</td>
<td>January 1 – March 31, 2015</td>
<td>Data must be submitted by May 31, 2015</td>
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<tr>
<td>Q2</td>
<td>April 1 – June 30, 2015</td>
<td>April 1 – June 30, 2015</td>
<td>Data must be submitted by August 31, 2015</td>
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<tr>
<td>Q3</td>
<td>July 1 – September 30, 2015</td>
<td>July 1 – September 30, 2015</td>
<td>Data must be submitted by November 30, 2015</td>
</tr>
<tr>
<td>Q4</td>
<td>N/A for EHR Incentive Program</td>
<td>October 1 – December 31, 2015</td>
<td>For Hospital IQR Program, Data must be submitted by February 28, 2016</td>
</tr>
</tbody>
</table>

16/28 eCQM Across 3 NQS Domains*
### IQR & EHR Incentive Program Alignment

#### Proposed Timelines

- **Voluntary eCQM Reporting**

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</thead>
<tbody>
<tr>
<td>2016 Reporting Period</td>
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<tr>
<td>Q1</td>
<td>January 1 – March 31, 2016</td>
<td>January 1 – March 31, 2016</td>
<td>Data must be submitted by May 31, 2016</td>
</tr>
<tr>
<td>Q2</td>
<td>April 1 – June 30, 2016</td>
<td>April 1 – June 30, 2016</td>
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- **Mandatory CY 2016 reporting period for FY 2018 payment determination**
IQR Proposed FY 2017 PY Changes*

• Fewer “Abstracted” Process of Care Measures
  - “Topped Out” Process Measures
  - MAP Recommendations
  - Provider Burden Outweighs Importance of Measure
  - Lost NQF Endorsement

• More Outcomes Measures
  - Claims Based with Risk Adjustment (? EHR CCDE Data)
  - Three Years of Data for Condition / Procedure Specific Measures
  - Episode of Care Cost Measures

* IPPS NPRM 42 CFR Parts 405, 412, 413, 415, 422, 424, 485, and 488
eMeasures (aka eCQM, CQM)

- eMeasures are performance measures that have been developed for use in an EHR or other electronic system. eMeasures pull the information needed to evaluate performance directly from the electronic record. They can be far more efficient than traditional approaches of extracting data from paper charts or claims databases.

- NQF Glossary
Figure 1: End-to-End Reporting Process

- **eMeasure (HQMF)**
- **EHR**
- **Individual quality report(s)**
- **Calculation engine**
- **Aggregate quality report**

**Data Sources:**
- Patient data
- Other systems

**Data Flow:**
- Patient data
- Patient data
- Patient data

**Data Warehouse (DW):**
- Informs

**Data Export:**
- QRDA Category I Reports
- HQMF eMeasures
- QRDA Category III Reports

**Data Capture:**
- Defined by QDM

**Source:** CMS Quality Reporting Document Architecture Informative Document Version 2.0, 1/15/14
QDM Data Element

- Value Set
- Quality Data Type
- Quality Data Attributes
eCQM Standards: QRDA

- HL7 CDA R2 Quality Reporting Document Architecture (QRDA)
  - Specifies a framework for quality reporting
  - Standardizes the representation of measure-defined data elements

- QRDA Category I-Single patient report
  - Exported from EHRs and other Data Systems
  - Consumed By Quality Reporting Engines

- QRDA Category III-Aggregate report
  - Calculated using HQMF and a calculation engine
**QRDA Category I**

### QRDA Incidence Report

**Patient**
- Name: Eve Everygirl
- Date of birth: February 1, 2002
- Sex: Female
- Race: White
- Ethnicity: Not Hispanic or Latino
- Contact info:
  - Address: 2222 Home Street, Burlington, MA 02178, US
  - Tel: (781)555-1212
- Patient IDs: 111223333A1.2.16.840.1.113883.4.572

**Document**
- Id: 5b010313-ef2-432c-9909-6193d8416f6c
- Created: December 31, 2011

**Performer**
- Author: Ann Quality, RN
  - Contact info:
    - Address: 1020 Healthcare Drive, Burlington, MA 02178, US
    - Tel: (555)355-1003
- Legal authenticator: Virgil Verity, MD of Good Health Hospital signed at December 31, 2011
  - Contact info:
    - Address: 21 North Ave, Burlington, MA 02178, US
    - Tel: (555)355-1003
- Document maintained by: Good Health Hospital
  - Contact info:
    - Address: 21 North Ave, Burlington, MA 02178, US
    - Tel: (555)355-1003

### Table of Contents
- Measure Section
- Reporting Parameters
- Patient Data

#### Measure Section

<table>
<thead>
<tr>
<th>eMeasure Title</th>
<th>Version neutral identifier</th>
<th>eMeasure Version Number</th>
<th>NQF eMeasure Number</th>
<th>eMeasure Identifiers (MAT)</th>
<th>Version specific identifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children's Asthma Care (CAC:1) Relievers for Inpatient Asthma</td>
<td>d6786e96-1487-4d7a-84c3-1cd69d0781c</td>
<td>1</td>
<td>0143</td>
<td>93</td>
<td>8a4d9282-373c</td>
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</tbody>
</table>

#### Reporting Parameters
- Reporting period: 01 Jan 2011 - 31 Dec 2011

#### Patient Data

<table>
<thead>
<tr>
<th>Data Element</th>
<th>Value</th>
<th>Date/Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Encounter, Performed: Emergency Department Visit</td>
<td>Emergency Department visit</td>
<td>03/01/2011 4:00</td>
</tr>
<tr>
<td>Encounter, Performed: Encounter Inpatient</td>
<td>Hospital admission</td>
<td>03/01/2011 9:00</td>
</tr>
<tr>
<td>Diagnosis, Active: Asthma</td>
<td>Asthma</td>
<td>01/01/2011</td>
</tr>
<tr>
<td>Medication, Administered: Asthma Reliever</td>
<td>Albuterol 1.25 MG (Albuterol sulfate 1.5 MG) per 3 ML Inhalant Solution</td>
<td>03/02/2011 9:00</td>
</tr>
<tr>
<td>Patient Characteristic Clinical Trial Participant</td>
<td>True</td>
<td>03/01/2011</td>
</tr>
<tr>
<td>Patient Characteristic Payer</td>
<td>Medicare</td>
<td>03/01/2011</td>
</tr>
</tbody>
</table>
QRDA Category III

Table of Contents
- Reporting Parameters
- QRDA Category III Measure Section

Reporting Parameters
- Reporting period: 01 January 2012 - 31 March 2012
- First encounter: 05 January 2012
- Last encounter: 24 March 2012

QRDA Category III Measure Section

<table>
<thead>
<tr>
<th>eMeasure Title</th>
<th>Version neutral identifier</th>
<th>eMeasure Version Number</th>
<th>NQF eMeasure Number</th>
<th>eMeasure Identifier (MAT)</th>
<th>Version specific identifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anticoagulation Therapy for Atrial Fibrillation/Flutter</td>
<td>03876d69-085b-415c-ae9d-9924171040c2</td>
<td>1</td>
<td>0436</td>
<td>71</td>
<td>8a4d22b2-26af-5755-0136-e8c43244806</td>
</tr>
</tbody>
</table>

Member of Measure Set: Clinical Quality Measure Set 2011-2012 - b6ac13e2-beb8-4c4f-94cd-fcc397406cd8

- Performance Rate: 83% (Predicted = 62%)
- Reporting Rate: 84%
- Initial Patient Population: 1000
  - Male: 400
  - Female: 600
  - Not Hispanic or Latino: 350
  - Hispanic or Latino: 650
  - Black: 300
  - White: 350
  - Asian: 550
  - Payer - Medicare: 250
  - Payer - Medicaid: 550
  - Zipcode 92543: 15
- Denominator: 500
  - Male: 200
  - Female: 300
  - Not Hispanic or Latino: 175
  - Hispanic or Latino: 325
  - Black: 150
  - White: 175
<table>
<thead>
<tr>
<th>Condition</th>
<th>Numerator</th>
<th>Denominator Only</th>
<th>Exclusions</th>
<th>Exceptions</th>
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</thead>
<tbody>
<tr>
<td>Acute Myocardial Infarction - 0142</td>
<td>64.29%</td>
<td></td>
<td>35.71%</td>
<td></td>
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<tr>
<td>Acute Myocardial Infarction - 0153</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute Myocardial Infarction - 0154</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute Myocardial Infarction - 0639</td>
<td>33.33%</td>
<td></td>
<td>66.67%</td>
<td></td>
</tr>
<tr>
<td>Asthma</td>
<td>100%</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Community Acquired Pneumonia - 0147 a</td>
<td>100%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community Acquired Pneumonia - 0147 b</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Newborn</td>
<td>100%</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Newborn</td>
<td>100%</td>
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</tr>
<tr>
<td>Stroke - 0435</td>
<td>75.64%</td>
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<td></td>
<td>24.36%</td>
</tr>
<tr>
<td>Stroke - 0436</td>
<td>15.38%</td>
<td></td>
<td>84.62%</td>
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</tr>
<tr>
<td>Stroke - 0437</td>
<td>50%</td>
<td></td>
<td></td>
<td>50%</td>
</tr>
<tr>
<td>Stroke - 0438</td>
<td>70.31%</td>
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<td>29.69%</td>
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<tr>
<td>Stroke - 0439</td>
<td>36.46%</td>
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<td>61.54%</td>
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</tr>
<tr>
<td>Stroke - 0440</td>
<td>97.06%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stroke - 0441</td>
<td>15.19%</td>
<td></td>
<td>84.81%</td>
<td></td>
</tr>
</tbody>
</table>

Survival Care Improvement Project - 0453
eMeasures: Many Differences
Core eCQM Issues

• “Re-Tooling” vs. “Re-Engineering” vs. “de-Novo”

• Data Capture Feasibility
  - EHR Capability
  - Provider Adoption / Readiness
  - Provider Workflow Variations

• Performance Validation
  - Comparability / Equivalency with Existing Measures
  - Specification Issues
  - Field Testing
  - “Point of Failure” Analysis
**diagnosis condition problem**
Hospital Measures - AMI active
ORDINAL
Starts During

**encounter**
Hospital Measures-Encounter Inpatient performed

**individual characteristic**
birth date
>= 18 years Starts Before Start of

**encounter**
Hospital Measures-Encounter Inpatient performed
Risk models are not standardized.

Currently limitations of the MAT do not allow for direct specification of risk adjusted measures.

eCQM metadata includes a reference to the complete risk model.

HQMF R2.x is able to create explicit Risk Adjustment Variable data criteria section.
HSCRC: eCQM Performance Measurement

• Alignment with CMS IQR eCQM’s
  - Retooled & De Novo Process Measures
  - EHR Data enriched Risk Adjusted Outcomes Measures

• Develop / Partner for eCQM Infrastructure
  - “Receive” & “Consume” QRDA I Data
  - eCQM Calculation Engine to generate QRDA III
  - Data and Performance Validation

• “Multi-modality” Performance Measurement
  - Integrate eCQM with Other Types of Measures
  - Develop De Novo Measures
Thank you!!

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