The Alphabet Soup that is Clinical Quality Measure Reporting Initiatives

Bill Presley, Vice President
Tuesday, May 31, 2016
## Acronyms in this Presentation

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACA</td>
<td>Affordable Care Act</td>
</tr>
<tr>
<td>ASCQR</td>
<td>Ambulatory Surgical Center Quality Reporting</td>
</tr>
<tr>
<td>ARRA</td>
<td>American Recovery and Reinvestment Act</td>
</tr>
<tr>
<td>CEHRT</td>
<td>Certified Electronic Health Record Technology</td>
</tr>
<tr>
<td>eCQM</td>
<td>Electronic Clinical Quality Measures</td>
</tr>
<tr>
<td>HAI</td>
<td>Healthcare-Associated Infection</td>
</tr>
<tr>
<td>HCAHPS</td>
<td>Hospital Consumer Assessment of Healthcare Providers and Systems</td>
</tr>
<tr>
<td>IACS</td>
<td>Individuals Authorized Access to the CMS Computer Services</td>
</tr>
<tr>
<td>IPFQR</td>
<td>Inpatient Psychiatric Facilities Quality Reporting</td>
</tr>
<tr>
<td>IPPS</td>
<td>Inpatient Payment Prospective System</td>
</tr>
<tr>
<td>IQR</td>
<td>Inpatient Quality Reporting</td>
</tr>
<tr>
<td>NHSN</td>
<td>National Healthcare Safety Network</td>
</tr>
<tr>
<td>MU</td>
<td>Meaningful Use EHR Incentive Program</td>
</tr>
<tr>
<td>OPPS</td>
<td>Outpatient Prospective Payment System</td>
</tr>
<tr>
<td>OQR</td>
<td>Outpatient Quality Reporting</td>
</tr>
<tr>
<td>PCCEC</td>
<td>Patient and Caregiver-Centered Experience of care/Care Coordination</td>
</tr>
<tr>
<td>PCHQR</td>
<td>PPS-Exempt Cancer Hospital Quality Reporting</td>
</tr>
<tr>
<td>VBP</td>
<td>Value-Based Purchasing</td>
</tr>
</tbody>
</table>
Agenda

- Quality Payment Reporting Initiatives
- Clinical Quality Measure Alignment
- Compare and Contrast Reporting Requirements
- Proposed Programs
- Helpful Resources
CMS Guiding Principles

- Patient Centric
- Clinician Driven
- Simplification
# Quality Payment Programs

## Hospital Quality
- EHR Incentive Program
- PPS-Exempt Cancer Hospitals
- Inpatient Psychiatric Facilities
- Inpatient Quality Reporting
- HAC payment reduction program
- Readmission reduction program
- Outpatient Quality Reporting
- Ambulatory Surgical Centers
- The Joint Commission (TJC)

## Physician Quality
- EHR Incentive Program
- Physician Quality Reporting System (PQRS)
- Value-Based Payment Modifier (VM)
- eRX Quality Reporting

## Quality Payment
- Medicare Shared Savings Program
- Hospital Value-Based Purchasing
- Accountable Care Organizations (ACO)
- ESRD QIP
Vision for Quality Reporting

One Spec to rule them all, One Spec to find them,
One Spec to bring them all and in the darkness bind them
Vision for Quality Reporting

**Unified** and **aligned set** of clinical quality measures and reporting requirements to synchronize and integrate CMS quality programs which will reduce reporting burden and improve on patient outcomes.
Quality Reporting Direction

The Future - One Specification

Core Measures (Chart Abstraction)

- Manual Chart Abstracted
- Paper-based specifications
- Translated to CMS Specification Manual

Clinical Quality Measure (eCQM)

- Electronically Captured
- Measure Concepts
- Electronic Codification
- Electronic Specification
- eCQM Library (One Spec)
Human vs Machine

Manual Abstraction Process

Capture: Patient Care documented

Interpret: Manual chart review by abstraction and coding

Calculate: Manual interpreted results calculated
Human vs Machine

Electronic Measure Process

- **Capture**: Patient Care documented
- **Codify**: Data codified and coding reviewed
- **Calculate**: Electronically calculate and report

[Diagram showing the process flow]
## Electronic Measures vs Manual Abstraction

### Specifications Manual
- The Specifications Manual for National Hospital Inpatient Quality Measures
- Uniform set of national hospital quality measures
- Paper tools for use in abstracting data for each collection (discharge) period are provided with the Specifications Manual

### eCQM Library
- Electronically specified versions of traditionally chart-abstracted Clinical Quality Measures
- Developed specifically so Certified Electronic Health Record Technology (CEHRT) can capture, calculate, export, and transmit the measure data
- For eReporting of eCQMs to demonstrate meaningful use or for Quality Reporting Programs

<table>
<thead>
<tr>
<th>Data Collection Period</th>
<th>Specifications Manual</th>
</tr>
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<tbody>
<tr>
<td>10/01/15 - 06/30/16</td>
<td>Version 5.0</td>
</tr>
<tr>
<td>01/01/15 - 09/30/15</td>
<td>Version 4.4a</td>
</tr>
<tr>
<td>01/01/14 - 12/31/14</td>
<td>Version 4.3b</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Reporting Year</th>
<th>eCQM Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>May 2015 Update</td>
</tr>
<tr>
<td>2015</td>
<td>April 2014 Update</td>
</tr>
<tr>
<td>2014</td>
<td>April 2013 Update</td>
</tr>
</tbody>
</table>
Quality Payment Program Alignment

VBP
- 30 Measures
  - IQR/ORYX/MU EH
    - 6 Measures
  - IQR
    - 4 Measures

ACO
- 25+ Measures
  - PQRS/MU EP
    - 9 Measures
  - PQRS
    - 9 Measures

Note: green indicates non-eCQM measures
# Hospital Quality Reporting Reductions

<table>
<thead>
<tr>
<th>Year</th>
<th>IQR</th>
<th>EHR MU</th>
<th>VBP</th>
<th>HAC</th>
<th>HRRP</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>2.0% MBU</td>
<td>N/A</td>
<td>1.0% DRG</td>
<td>N/A</td>
<td>1.0% DRG</td>
</tr>
<tr>
<td>2014</td>
<td>2.0% MBU</td>
<td>N/A</td>
<td>1.25% DRG</td>
<td>N/A</td>
<td>2.00% DRG</td>
</tr>
<tr>
<td>2015</td>
<td>0.25% MBU</td>
<td>0.25% MBU</td>
<td>1.50% DRG</td>
<td>1.0% DRG</td>
<td>3.00% DRG</td>
</tr>
<tr>
<td>2016</td>
<td>0.25% MBU</td>
<td>0.50% MBU</td>
<td>1.75% DRG</td>
<td>1.0% DRG</td>
<td>3.00% DRG</td>
</tr>
<tr>
<td>2017</td>
<td>0.25% MBU</td>
<td>0.75% MBU</td>
<td>2.00% DRG</td>
<td>1.0% DRG</td>
<td>3.00% DRG</td>
</tr>
</tbody>
</table>

MBU = Market Basket Update  
DRG = Diagnosis-related group
Hospital Quality Reporting Reductions

IQR  EHR  VBP  HAC  HRRP

2013  2014  2015  2016  2017

0.0%  1.0%  2.0%  3.0%  4.0%  5.0%  6.0%  7.0%

Acemeware
### Physician Quality Reporting Reductions

<table>
<thead>
<tr>
<th>Year</th>
<th>PQRS</th>
<th>EHR</th>
<th>VBPM+</th>
<th>Sequestration</th>
<th>Total</th>
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<tbody>
<tr>
<td>2013</td>
<td>0.5%</td>
<td>N/A</td>
<td>N/A</td>
<td>-2.0%</td>
<td>-1.5%</td>
</tr>
<tr>
<td>2014</td>
<td>0.5%</td>
<td>N/A</td>
<td>N/A</td>
<td>-2.0%</td>
<td>-1.5%</td>
</tr>
<tr>
<td>2015</td>
<td>-1.5%</td>
<td>-1.0%</td>
<td>-1.0%</td>
<td>-2.0%</td>
<td>-5.5%</td>
</tr>
<tr>
<td>2016</td>
<td>-2.0%</td>
<td>-2.0%</td>
<td>-2.0%</td>
<td>-2.0%</td>
<td>-8.0%</td>
</tr>
<tr>
<td>2017</td>
<td>-2.0%</td>
<td>-3.0%</td>
<td>-4.0%</td>
<td>-2.0%</td>
<td>-11.0%</td>
</tr>
</tbody>
</table>

Applied to all Medicare reimbursements

Schedule of payment adjustments depends on the size of the medical practice, starting with 100+ EPs in 2015, followed by 10 to 99, then all. Table reports maximum penalty.
Physician Quality Reporting Reductions

2013  2014  2015  2016  2017

PQRS  EHR  VBPM+  Sequestration

Acmeware
IQR

INPATIENT QUALITY REPORTING
IQR Purpose

- Provide hospital transparency about quality and safety
- Provide consumers (us) with quality of care information to make better decisions
- Publish on CMS Hospital Compare website
- Resulting in improved quality of inpatient care to all patients
- Provides incentives to report quality of care measures
IQR Background

- Medicare Modernization Prescription Drug, Improvement and Modernization Act (MMA) of 2003
  - Non-submission would result in a 0.4% reduction in APU

- Deficit Reduction Act of 2005
  - Non-submission would result in a 2.0% reduction in APU

- CMS issued the 2014 Inpatient Prospective Payment System (IPPS) final rules to align IQR with eCQM.

- CMS issued the 2016 Inpatient Prospective Payment System (IPPS) mandating eCQM for IQR program.
IQR Penalties

- Social Security Act, starting in FY 2015, penalized hospitals that fail to submit quality information.

<table>
<thead>
<tr>
<th>Reporting Period</th>
<th>Fiscal Year</th>
<th>IQR Reduction</th>
<th>EHR Incentive Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>2015</td>
<td>¼ MBU</td>
<td>33 1/3% of 3/4 MBU = 1/4 of MBU</td>
</tr>
<tr>
<td>2014</td>
<td>2016</td>
<td>¼ MBU</td>
<td>66 2/3% of 3/4 MBU = 1/2 of MBU</td>
</tr>
<tr>
<td>2015</td>
<td>2017</td>
<td>¼ MBU</td>
<td>100% of 3/4 MBU = 3/4 of MBU</td>
</tr>
<tr>
<td>2016</td>
<td>2018</td>
<td>¼ MBU</td>
<td>100% of 3/4 MBU = 3/4 of MBU</td>
</tr>
</tbody>
</table>
IQR Requirements

- Create CMS Portal and QualityNet Administrator Accounts
- Complete the Hospital IQR Program Notice of Participation
- Collect and report data:
  - Clinical data
  - HCAHPS data
  - HAI measures reported through NHSN
  - Structural measures
  - Data Accuracy and Completeness Acknowledgement
- Meet validation requirements
- Quality data published to Hospital Compare (not eCQMs)
IQR Resources

CMS Enterprise Portal
https://portal.cms.gov

Hospital Compare
www.medicare.gov/hospitalcompare

Quality Reporting Center
http://www.qualityreportingcenter.com

QualityNet
www.qualitynet.org
MU

EHR INCENTIVE PROGRAM

“MEANINGFUL USE”
EHR Incentive Program Purpose

- Known as “Meaningful Use”, provides Medicare and Medicaid incentive payments to qualifying physicians and hospitals, when they adopt and use Certified Electronic Health Record Technology (CEHRT)

- CEHRT adoption promotes:
  - Improve quality, safety, efficiency, and reduce health disparities
  - Engage patients and their families
  - Improve care coordination
  - Ensure adequate privacy and security protections for personal health information
  - Improve population and public health
EHR Incentive Program Background

- The American Recovery and Reinvestment Act (ARRA) established in 2009, a framework of financial incentives to stimulate growth and improve the health care system.

- CMS published Meaningful Use CEHRT regulations in:
  - Stage 1 Final Rule published July 2010
  - Stage 2 Final Rule published September 2012
  - Stage 3 Final Rule published October 2015
EHR Incentive Program Penalties

- Payment adjustment amounts are tied to the year hospitals do not demonstrate meaningful use.
- Payment adjustment is tied to the percentage increase for the Inpatient Prospective Payment System (IPPS) rate.
- Hospitals that do not meet meaningful use in 2018 will receive a 75% reduced update.
EHR Incentive Program Requirements

- Utilization of certified EHR technology (CEHRT)
- Value Set Nomenclature Mapping
- Submission of objective measures and electronic clinical quality measures (eCQM)

Submission of clinical quality measure data:
  - Option 1: Aggregate reporting of numerators and denominators in the CMS Registration and Attestation system
  - Option 2: Submission of QRDA files to QualityNet
## EHR Incentive Program Penalties

<table>
<thead>
<tr>
<th>Reporting Period</th>
<th>Fiscal Year</th>
<th>EHR Incentive Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>2015</td>
<td>33 1/3% of 3/4 MBU = 1/4 of MBU</td>
</tr>
<tr>
<td>2014</td>
<td>2016</td>
<td>66 2/3% of 3/4 MBU = 1/2 of MBU</td>
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</tr>
<tr>
<td>2016</td>
<td>2018</td>
<td>100% of 3/4 MBU = 3/4 of MBU</td>
</tr>
</tbody>
</table>
EHR Incentive Program Resources

National Library of Medicine

eCQM Library

eCQI Resource Center
https://ecqi.healthit.gov
ORYX

THE JOINT COMMISSION PERFORMANCE MEASURES PROGRAM
ORYX Program Purpose

- The Joint Commission’s ORYX® initiative integrates outcomes and other performance measurement data into the accreditation process.

- ORYX measurement requirements are intended to support Joint Commission accredited organizations in their quality improvement efforts.

- ORYX measures are publicly reported on The Joint Commission website at www.qualitycheck.org.
ORYX Program Background

- Hospitals began reporting core measures nearly 15 years ago as part of hospital accreditation by the Joint Commission.
- In 1999, the first ORYX data transmitted to the Joint Commission from hospitals and long term care organizations.
- In 2007, added seven hospital outpatient measures to core measure sets to satisfy ORYX performance measurement requirements.
- New in 2015, offered Hospitals greater flexibility in meeting ORYX performance measures with eCQM reporting.
ORYX Program Requirements

- As of 2015, Core measures have been aligned with CMS eCQM Specifications.
- Hospitals will have the flexibility of meeting ORYX reporting requirements through one of three options:
  - Option 1: Chart-abstracted measures.
  - Option 2: Electronic clinical quality measures (eCQMs).
  - Option 3: Combination of chart-abstracted measures and eCQMs.
- Perinatal care will remain mandatory in 2016 for hospitals with at least 300 live births per year.
- Approved ORYX Vendor for Chart Abstraction or eCQM.
# ORYX Program Requirements

## Option 1
Select and Report Data on:

### Modified Sets of Chart-Abstracted Measures
- Select and report on six of nine sets of chart-abstracted measures for calendar year 2016 applicable to the services provided and patient populations served by the hospital.
- Perinatal Care will remain required as one of the six sets if applicable, i.e., at least 300 live births per year.

## Option 2
Select and Report Data on:

### eCQM Sets Only
- Select six of the eight eCQM sets applicable to the services provided and patient populations served by the hospital. Report on either or both 3rd and 4th quarters for calendar year 2016.
- Data MUST be reported on AT LEAST ONE eCQM in the eCQM SET(s) selected.
- Perinatal Care will remain required as one of the six sets if applicable, i.e., at least 300 live births per year.

## Option 3
Select and Report Data on:

### Combination of Chart-Abstracted and eCQM Sets
- Select and report on six sets of measures applicable to the services provided and patient populations served by the hospital.
- Perinatal Care will remain required as one of the six sets if applicable, i.e., at least 300 live births per year.
- Measure sets will be selected from among the available complement of core measure sets (See Options 1 chart-abstracted and 2 eCQM Sets)
- Hospitals wishing to select this option and that may be interested in reporting on the same set(s) of chart-abstracted and CQMs should contact Frank Zibrat at 630-792-5992 or via e-mail at fzibrat@jointcommission.org
- See notes under Option 2

### Joint Commission Chart Abstraction Measure Sets
- ED-1a, ED-2a
- PC-01, PC-02, PC-03, PC-04, PC-05
- STK-4
- VTE-5, VTE-6
- IMM-2
- HBIPS-1, HBIPS-2, HBIPS-3, HBIPS-5
- SUB-1, SUB-2, SUB-3
- TOB-1, TOB-2, TOB-3
- OP-1, OP-2, OP-3, OP-4, OP-5, OP-18, OP-20, OP-21, OP-23

### Joint Commission eCQM Measure Sets
- eAMI-7a, eAMI-8a
- eCAC-3
- eED-1a, eED-2a
- ePC-01, ePC-05/5a
- eSTK-2, eSTK-3, eSTK-4, eSTK-5, eSTK-6, eSTK-8, eSTK-10
- eSCIP-INF-1, eSCIP-INF-9
- eEHDI-1a
ORYX Program Resources

The Joint Commission
http://www.jointcommission.org

ORYX Program
http://www.jointcommission.org/facts_about_oryx_for_hospitals/default.aspx

Pioneers in Quality
https://www.jointcommission.org/topics/pioneers_in_quality.aspx
VBP

VALUE-BASED PURCHASING
VBP Program Purpose

- Required by the Affordable Care Act for IPPS hospitals; quality payment program
- Moving toward rewarding better value, outcomes, and innovations, instead of volume
- Promote better clinical outcomes for hospital patients
- Improve patient experience of care during hospital stays
VBP Program Background

- Funded by reductions from Diagnosis-Related Group (DRG) payments; Budget Neutral
- Built on the Hospital Inpatient Quality Reporting (IQR) measure reporting infrastructure
- Measures collected through the Hospital IQR Program infrastructure
- Reimbursements based on either national benchmarks or internal improvements
VBP Program Domains and Measures

- Safety: 25%
- Efficiency and Cost Reduction: 25%
- Clinical Care: 25%
- PCCEC/CC: 25%
VBP Program Domains and Measures

**MORT-30-AMI:**
Acute Myocardial Infarction (AMI)
30-Day Mortality Rate

**MORT-30-HF:**
Heart Failure (HF)
30-Day Mortality Rate

**MORT-30-PN:**
Pneumonia (PN)
30-Day Mortality Rate

Clinical Care 25%
HCAHPS Dimensions:

- Communication with Nurses
- Communication with Doctors
- Responsiveness of Hospital Staff
- Pain Management
- Communication about Medicines
- Cleanliness and Quietness of Hospital Environment
- Discharge Information
- Overall Rating of Hospital
- 3-Item Care Transition*
**VBP Program Domains and Measures**

- **AHRQ PSI-90**: Complication/patient safety for selected indicators (composite)
- **CLABSI**: Central line-associated blood stream infections among adult, pediatric, and neonatal Intensive Care Unit (ICU) patients
- **CAUTI**: Catheter-associated urinary tract infections among adult and pediatric ICUs
- **SSI**: Surgical site infections specific to abdominal hysterectomy and colon surgery
- **MRSA**: Methicillin-Resistant *Staphylococcus aureus* Bacteremia
- **CDI**: *Clostridium difficile* Infection
- **PC-01**: Elective Delivery prior to 39 Completed Weeks of Gestation
VBP Program Domains and Measures

MSPB-1 Medicare Spending by Beneficiary

- Claims-Based Measure
- Includes risk-adjusted and price-standardized payments for Part A and Part B services provided three days prior to hospital admission through 30 days after hospital discharge

Efficiency and Cost Reduction 25%
### VBP Program Penalties

Reimbursement = Achievement + Improvement

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Withholding</th>
<th>Total VBP Incentive Payments</th>
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</thead>
<tbody>
<tr>
<td>2014</td>
<td>1.25%</td>
<td>$1.1 Billion</td>
</tr>
<tr>
<td>2015</td>
<td>1.50%</td>
<td>$1.4 Billion</td>
</tr>
<tr>
<td>2016</td>
<td>1.75%</td>
<td>$1.5 Billion</td>
</tr>
<tr>
<td>2017</td>
<td>2.00%</td>
<td>---</td>
</tr>
</tbody>
</table>
VBP Program Resources

Quality Reporting Center

http://www.qualityreportingcenter.com/inpatient/vbp-archived-events

CMS VBP


QualityNet

https://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier2&cid=1228772039937
HRRP

HOSPITAL READMISSIONS REDUCTION PROGRAM
HRRP Program Purpose

- The Affordable Care Act (ACA) established the Hospital Readmissions Reduction Program (HRRP).
- Requires the CMS to adjust payments to hospitals with excess unplanned readmissions for certain conditions.
- Aims to improve the quality of care by improving communication and care coordination, while reducing the costs.
According to CMS, historically about one in five Medicare patients discharged from a hospital are readmitted within 30 days.

In 2005, the Medicare Payment Advisory Commission (MedPAC) concluded that about three-quarters of readmissions within 30 days were preventable. Estimated at $12 billion in Medicare spending.
## HRRP Program Requirements

<table>
<thead>
<tr>
<th>Readmission Measures</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute myocardial Infarction</td>
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<td>✅</td>
<td>✅</td>
<td>✅</td>
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<td>Heart failure</td>
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<td>Pneumonia</td>
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<td>✅</td>
<td>✅</td>
<td>✅</td>
<td>✅</td>
</tr>
<tr>
<td>Chronic obstructive pulmonary disease</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total hip arthroplasty/Total knee arthroplasty</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coronary artery bypass graft surgery</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✅</td>
</tr>
</tbody>
</table>
HRRP Program Penalties

- Hospitals below national average for any one of the conditions are subject to a payment adjustment.
- Payment adjustment applies to all Medicare discharges for that year, not just a hospital’s readmissions.

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Total Hospitals</th>
<th>Estimated Savings for Medicare</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>2,214</td>
<td>$280 Million (0.2% of payments)</td>
</tr>
<tr>
<td>2014</td>
<td>2,225</td>
<td>$227 Million (0.2% of payments)</td>
</tr>
<tr>
<td>2015</td>
<td>2,638</td>
<td>$428 Million (0.4% of payments)</td>
</tr>
</tbody>
</table>
HRRP Program Resources

QualityNet Program

https://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier2&cid=1228772412458

CMS Acute IPPS


Quality Reporting Programs

https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Value-Based-Programs/HRRP/Hospital-Readmission-Reduction-Program.html
HAC
HOSPITAL ACQUIRED CONDITIONS
HAC Program Purpose

- The Affordable Care Act (ACA) established the HAC Reduction Program to incentivize hospitals to reduce hospital-acquired conditions (HACs)
- Payment adjustments to discharges started in FY 2015
- Payment adjustments for lowest performing quartile
- Improve patient outcomes with quality measurements
HAC Program Background

- Applies to hospitals paid under the Medicare Inpatient Prospective Payment System (IPPS)

- Program does not affect:
  - Long-term acute care hospitals
  - Cancer hospitals
  - Children’s hospitals
  - Inpatient rehab facilities
  - Inpatient psychiatric facilities
  - Critical access hospitals
## HAC Program Requirements

<table>
<thead>
<tr>
<th>HAC Measures</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient Safety Indicator (PSI) 90 Composite</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Central line-associated bloodstream infection (CLABSI)</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Catheter associated urinary tract infection (CAUTI)</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Surgical site infection (SSI) (colon and hysterectomy)</td>
<td></td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Methicillin-resistant Staphylococcus (MRSA)</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Clostridium difficile (C.diff)</td>
<td></td>
<td></td>
<td>✔</td>
</tr>
</tbody>
</table>
HAC Program Penalties

- Reduce hospital payments by 1 percent for hospitals that rank among the lowest-performing 25 percent.
- All hospitals receive between 1 and 10 points per measure - Higher Score = Worse Performance
- 1% penalty to any hospital that falls into the bottom 25%
HAC Program Resources

Quality Reporting Programs
https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Value-Based-Programs/HAC/Hospital-Acquired-Conditions.html

Hospital Compare
www.medicare.gov/hospitalcompare/HAC-reduction-program.html

QualityNet HAC Reduction Program
www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier2&cid=1228774189166
OQR

OUTPATIENT QUALITY REPORTING
OQR Program Purpose

- The Hospital Outpatient Quality Reporting (OQR) Program is a quality measure reporting program implemented by the CMS for outpatient hospital services.

- Starting CY 2009, Hospitals report data using standardized measures of care to receive the full annual update to their Outpatient Prospective Payment System (OPPS) rate.

- Pay for quality data reporting program.
OQR Program Background

- CMS publicly reports Hospital OQR data
- OQR Program is modeled after the IQR Program
- OQR Program is a voluntary for outpatient hospital services
- OQR focuses on quality measures that have a high impact and improved quality and efficiency.
  - process of care, imaging efficiency patterns, care transitions, ED throughput efficiency, use of Health Information Technology (HIT) care coordination, patient safety and volume.
OQR Program Requirements

- Measures submitted on QualityNet
- Clinical data submission is accomplished in one of two ways:
  - CMS Abstraction & Reporting Tool (CART)
  - Third party vendor
- Hospitals measurements published to Hospital Compare
- CMS is considering a proposal for eCQM submissions
## Timeline for 2016

<table>
<thead>
<tr>
<th>Specifications Manual</th>
<th>Implementation Date (for encounters beginning)</th>
<th>Projected Date for Specifications Manual and Release Note Updates</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 2016</td>
<td>01/01/2016</td>
<td>07/01/2015 (180 Days prior to release)</td>
</tr>
<tr>
<td>July 2016</td>
<td>07/01/2016</td>
<td>01/01/2016 (180 days prior to release)</td>
</tr>
<tr>
<td>January 2017</td>
<td>01/01/2017</td>
<td>07/01/2016 (180 days prior to release)</td>
</tr>
<tr>
<td>July 2017</td>
<td>07/01/2017</td>
<td>01/01/2017 (180 days prior to release)</td>
</tr>
</tbody>
</table>
OQR Program Penalties

- Hospitals that meet measure reporting requirements during a calendar year to receive their full OPPS reimbursements

- Fail to meet these requirements receive a 2% reduction of their APU
OQR Program Resources

Hospital OQR Program

www.qualityreportingcenter.com

Quality Reporting Center

http://www.qualityreportingcenter.com/hospitaloqr

OQR Measures

https://www.qualitynet.org/dcs/ContentServer?c=Page&pageName=QnetPublic%2FPage%2FQnetTier3&cid=1192804531207

Hospital OQR ListServe

www.qualitynet.org/dcs/ContentServer?pagename=QnetPublic/ListServe/Register
PQRS

PHYSICIAN QUALITY REPORTING SYSTEM
PQRS Program Purpose

- The Physician Quality Reporting System (PQRS) is a quality reporting program for eligible professionals (EPs) and group practices to measure quality of care.
- PQRS allows EPs the ability to assess the quality of care they provide to their patients.
- Help ensure that patients get the right care at the right time.
PQRS Program Background

- PQRS formerly known as the Physician Quality Reporting Initiative (PQRI)
- Tax Relief and Health Care Act of 2006 (TRHCA), PQRI with a bonus payment of 1.5 percent for successful participation
- Under the Medicare Improvement for Patients and Providers Act of 2008 (MIPPA), PQRS program was made permanent
- Beginning in 2015, negative payment adjustment
<table>
<thead>
<tr>
<th>Year</th>
<th>PQRS Adjustment</th>
<th>EP Meaningful Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>0.5% (2015 penalty)</td>
<td>N/A</td>
</tr>
<tr>
<td>2014</td>
<td>0.5% (2016 penalty)</td>
<td>N/A</td>
</tr>
<tr>
<td>2015</td>
<td>-1.5%</td>
<td>-1.0%</td>
</tr>
<tr>
<td>2016</td>
<td>-2.0%</td>
<td>-2.0%</td>
</tr>
<tr>
<td>2017</td>
<td>-2.0%</td>
<td>3.0%</td>
</tr>
</tbody>
</table>
PQRS Submission Requirements

- Submission of at least 9 of 64 eCQMs across at least 3 National Quality Strategy (NQS) domain distribution

- 6 NQS Domains:
  - Patient & Family Engagement
  - Patient Safety
  - Care Coordination
  - Population/Public Health
  - Efficient Use of Healthcare Resources
  - Clinical Processes / Effectiveness

- QRDA I or QRDA category III

- Submission must be for a **full calendar year** by February 29, 2016

- Must submit using July 2014 Update for eCQMs
  - EHR re-certification not required

<table>
<thead>
<tr>
<th>Reporting Year</th>
<th>eCQM Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>May 2015 Update</td>
</tr>
<tr>
<td>2015</td>
<td>July 2014 Update</td>
</tr>
<tr>
<td>2014</td>
<td>June 2013 Update</td>
</tr>
</tbody>
</table>
PQRS EP Eligibility

Eligible Professionals differ between CMS Programs.

Acute (Hospital Based)
- EP
  - Hospitalist
    - PQRS

ED Provider
- PQRS

Ambulatory
- EP
  - Ortho Practice
    - MU
    - PQRS
  - Family Practice
    - MU
    - PQRS
  - Private Practice
    - MU
    - PQRS
### PQRS EP Eligibility

- CMS provides an eligibility assessment tool
- eHealth Eligibility Assessment Tool

### Meaningful Use

<table>
<thead>
<tr>
<th>Providers Physician Fee Schedule (PFS) services furnished to Medicare Part B Fee-For-Service (FFS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital-based EPs cannot participate</td>
</tr>
<tr>
<td>Hospital-based EPs cannot exceed 90% of services inpatient (POS 21) or ED (POS 23)</td>
</tr>
</tbody>
</table>

### List of Eligible Professionals

#### Physicians

<table>
<thead>
<tr>
<th>MU</th>
<th>PQRS</th>
</tr>
</thead>
<tbody>
<tr>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

- Doctors of Medicine
- Doctor of Osteopathy
- Doctor of Podiatric Medicine
- Doctor of Optometry
- Doctor of Oral Surgery
- Doctor of Dental Medicine
- Doctor of Chiropractic

#### Practitioners

<table>
<thead>
<tr>
<th>MU</th>
<th>PQRS</th>
</tr>
</thead>
<tbody>
<tr>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

- Physician Assistant
- Advanced Practice Registered Nurse
- Nurse Practitioner
- Clinical Nurse Specialist
- Certified Registered Nurse Anesthetist
- Anesthesiologist Assistant
- Certified Nurse Midwife
- Clinical Social Worker
- Clinical Psychologist
- Registered Dietician
- Nutrition Professional
- Audiologist

#### Therapists

<table>
<thead>
<tr>
<th>MU</th>
<th>PQRS</th>
</tr>
</thead>
<tbody>
<tr>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

- Physical Therapist
- Occupational Therapist
- Qualified Speech-Language Therapist

**MU = Eligible for Medicare or Medicaid EHR Incentive Program**

**PQRS = Eligible for PQRS Reporting**
PQRS Program Resources

QualityNet PQRS

https://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier2&cid=1187820137434

eCQM Reporting


CMS Website

The Future of Quality Reporting

- 2016 Inpatient Prospective Payment System (IPPS) Rule mandates eCQM

- 2016 IPPS eCQM Submission Requirements for IQR
  - 4 eCQMs reflecting Q3 or Q4 CY 2016

- In 2015 Joint Commission issued guidance that they were transitioning from Core Measures to CMS eCQM Specifications

- Outpatient Quality Reporting Program (OQR) has a proposed 2017 eCQM requirement

- Comprehensive Primary Care Initiatives have embedded eCQM submission into their reporting options
Prepare Now for eCQM

What are eCQMs?

- Electronically specified versions of traditionally chart-abstracted Clinical Quality Measures
- Developed specifically so Certified Electronic Health Record Technology (CEHRT) can capture, calculate, export, and transmit the measure data
- Electronic Codification of Patient Health Record
2017 IPPS Proposal

• Full year, four quarters of data for all eCQMs included in the Hospital IQR Program measure set in 2017

• Remove 15 eCQM measures for the CY 2017 reporting period

• Remove 2 chart-abstracted measures for the CY 2017 reporting period

• Modify the current validation process starting CY 2018
2017 IPPS Proposal - eCQMs Removed

- **Meaningful Use (MU)**
- **Inpatient Quality Reporting (IQR)**

* Excluded from IQR and ORYX
Finalized List of eCQMs for 2017

- AMI-8a - Primary PCI Received Within 90 Minutes of Hospital Arrival
- CAC-3 - Home Management Plan of Care Document Given to Patient/Caregiver
- ED-1 - Median Time from ED Arrival to ED Departure for Admitted ED Patients
- ED-2 - Admit Decision Time to ED Departure Time for Admitted Patients
- EHDI-1a - Hearing Screening Prior to Hospital Discharge 1354
- PC-01 - Elective Delivery
- PC-05 - Exclusive Breast Milk Feeding
- STK-02 - Discharged on Antithrombotic Therapy
- STK-03 - Anticoagulation Therapy for Atrial Fibrillation/Flutter
- STK-05 - Antithrombotic Therapy by the End of Hospital Day Two
- STK-06 - Discharged on Statin Medication
- STK-08 - Stroke Education
- STK-10 - Assessed for Rehabilitation
- VTE-1 - Venous Thromboembolism Prophylaxis
- VTE-2 - Intensive Care Unit Venous Thromboembolism Prophylaxis
## 2017 IPPS Proposal - Chart-Abstracted

<table>
<thead>
<tr>
<th>Measure</th>
<th>Measure Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED-1</td>
<td>Median Time from ED Arrival to ED Departure for Admitted ED Patients</td>
</tr>
<tr>
<td>ED-2</td>
<td>Admit Decision Time to ED Departure Time for Admitted Patients</td>
</tr>
<tr>
<td>IMM-2</td>
<td>Influenza Immunization</td>
</tr>
<tr>
<td>SEP-1</td>
<td>Severe Sepsis and Septic Shock: Management Bundle (Composite Measure)</td>
</tr>
<tr>
<td>STK-04</td>
<td>Thrombolytic Therapy</td>
</tr>
<tr>
<td>VTE-5</td>
<td>Venous Thromboembolism Discharge Instructions</td>
</tr>
<tr>
<td>VTE-6</td>
<td>Incidence of Potentially Preventable Venous Thromboembolism</td>
</tr>
<tr>
<td>PC-01</td>
<td>Elective Delivery (Collected in aggregate and submitted via Web-based tool)</td>
</tr>
</tbody>
</table>
## 2017 IPPS Proposal - Validation

<table>
<thead>
<tr>
<th>Current Validation Process</th>
<th>Number of Hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chart-Abstracted Random</td>
<td>400</td>
</tr>
<tr>
<td>Chart-Abstracted Targeted</td>
<td>200</td>
</tr>
<tr>
<td>Total</td>
<td>600</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Proposed Validation Process</th>
<th>Number of Hospitals</th>
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</thead>
<tbody>
<tr>
<td>Chart-Abstracted Random</td>
<td>400</td>
</tr>
<tr>
<td>Chart-Abstracted Targeted</td>
<td>200</td>
</tr>
<tr>
<td>eCQM: random</td>
<td>200</td>
</tr>
<tr>
<td>Total</td>
<td>800</td>
</tr>
</tbody>
</table>
What’s On The Horizon?

- Medicare Access & CHIP Reauthorization Act of 2016
  - MACRA puts an end to the SGR for determining healthcare provider reimbursements
  - New framework for Eligible Clinicians based on Clinical Quality Measures
  - Combining quality reporting programs into 1 system; MIPS
    - The separate payment adjustments that are determined under PQRS, Value Modifier and Meaningful Use will all sunset as of Dec 31, 2018.
  - Advancing Care Information replaces Meaningful Use
  - Enhanced Oversight and Accountability
Current Physician eCQM Programs
Merit-Based Incentive Program (MIPS)

- PQRS
  - eCQM

Value-Based Modifier Payment

- eCQM
  - Claims

Meaningful Use

- Objective Measures
- eCQM

Composite Scoring 1 - 100

Clinical Practice

Advancing Care

Quality

Resource Use
MIPS Eligibility

Acute
- Hospitalist
- ED Provider
- Ortho Practice

Ambulatory
- Family Practice
- Private Practice
## Timeline

### Fee Schedule Updates
- **2015 and earlier:**
  - 2015: 0.5
  - 2016: 0.5
  - 2017: 0.5
  - 2018: 0.5
  - 2019: 0
  - 2020: 0
  - 2021: 0
  - 2022: 0
  - 2023: 0
  - 2024: 0
  - 2025: 0
  - 2026 and later: 0.75 QAPMCF
- **non-quality APM conversion factor:** 0.25

### MIPS
- **Quality:**
  - 2015 and earlier: 4%
  - 2016 and later: 9%
- **Resource Use:**
  - 2015 and earlier: 5%
  - 2016 and later: 7%
- **Clinical Practice Improvement Activities:**
  - 2015 and earlier: 4%
  - 2016 and later: 9%
- **Meaningful Use of Certified EHR Technology:**
  - 2015 and earlier: 4%
  - 2016 and later: 9%
- **PQRS, Value Modifier, EHR Incentives:**
  - 2015 and earlier: 4%
  - 2016 and later: 9%
- **MIPS Payment Adjustment (+/-):**
  - 2015 and earlier: 4%
  - 2016 and later: 9%

### Certain APMs
- **Qualifying APM Participant:**
  - Medicare Payment Threshold
  - Excluded from MIPS
- **5% Incentive Payment:**
  - Excluded from MIPS

---

*Qualifying APM conversion factor
**Non-qualifying APM conversion factor*
Advancing Care Measures

1. Protect Patient Health Information - Security Risk Analysis

2. Electronic Prescribing

3. Patient Electronic Access
   a. Patient Access
   b. Patient-specific education

4. Coordination of Care through Patient Engagement
   a. View/Download/Transmit
   b. Secure Messaging
   c. Patient Generated Health Data

5. Health Information Exchange - Patient Care Record Exchange
   a. Request/Accept Patient Care Record
   b. Clinical Information Reconciliation

6. Public Health and Clinical Data Registry Reporting - Immunization Registry Reporting
Enhanced Oversight and Accountability

- ONC expands role of oversight
- Attest to cooperation with certain authorized IT surveillance and oversight activities
- Clinicians required to give access to their EHR
- No restriction of data sharing and interoperability
Advancing Care Requirements

- Submission for full year, CY 2017, Objective and eCQM measures
- Requires 2014 or 2015 Edition Certified EHR
- Report on either (8) stage 2 or (6) stage 3 Advancing Care Information objectives and measures
  - Previously known as Meaningful Use measures
- Attest to cooperation with certain authorized IT surveillance and oversight activities
Meeting Requirements of Multiple Programs

IQR, MU, ORYX
Hospital Inpatient Quality Reporting (IQR)

The Hospital IQR Program has several components which are mandatory in order to fulfill program requirements.

Components:
- Validation
- Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS)
- Clinical and Hospital Associated Infections (HAI)
- Population and Sampling
- Structural Measures
- Web-Based Measures

Submission Requirements:
- Each component has its own submission requirements and deadlines
Hospital Inpatient Quality Reporting (IQR)

The clinical and HAI component of the Hospital IQR program is made up of a total of 69 measures.

Submission Requirements:

Data for these measures is submitted in different ways depending on the measure, including:
- Chart-abstracted
- Web-based
- Claims-based
- eCQM

eCQMs:
- Do not eliminate the requirement to submit data for the remaining chart-abstracted, web-based, and claims-based measures
- Can be used to fulfill a portion of the chart-abstracted measure requirements
- Chart-abstracted data will still need to be submitted for remaining measures
Program Requirements - IQR

- 4 measures submitted via eCQM
- 8 measures submitted via Chart Abstraction
- 6 measures via NHSN Submission
- 24 measures via Claims
- 4 measures via Web Entry
- 1 measure via Patient Survey
Hospital Quality Measures

- **Meaningful Use (MU)**
- **Inpatient Quality Reporting (IQR)**
- **Joint Commission (ORYX)**

* Excluded from IQR and ORYX
<table>
<thead>
<tr>
<th>Measure</th>
<th>Description</th>
<th>MU EH</th>
<th>IQR</th>
<th>ORYX-eCQM</th>
<th>ABSTRACTION</th>
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</thead>
<tbody>
<tr>
<td>AMI-1</td>
<td>Aspirin at Arrival</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AMI-2</td>
<td>Aspirin at Discharge</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AMI - 7A</td>
<td>Fibrinolytic Therapy received within 30 minutes of Hospital Arrival</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>AMI - 8A</td>
<td>Primary PCI Received Within 90 Minutes of Hospital Arrival</td>
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<td>AMI-10</td>
<td>Statin at Discharge</td>
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<td>ED-1</td>
<td>ED Arrival to Departure for Admitted Patients</td>
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<tr>
<td>ED-2</td>
<td>ED Admit Decision to Departure for Admitted Patients</td>
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<td>ED-3</td>
<td>Median Time ED Arrival to ED Departure for discharged patients</td>
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<td>STK-1</td>
<td>Venous Thromboembolism (VTE) Prophylaxis</td>
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<tr>
<td>STK-2</td>
<td>Discharge on Antithrombotic Therapy</td>
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<tr>
<td>STK-3</td>
<td>Anticoagulation therapy for Atrial Fibrillation/Flutter</td>
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<td>STK-4</td>
<td>Thrombolytic Therapy</td>
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<td>STK-5</td>
<td>Antithrombotic Therapy by end of Hospital Day 2</td>
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<tr>
<td>STK-6</td>
<td>Discharged On Statin Medication</td>
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<tr>
<td>STK-8</td>
<td>Stroke Education</td>
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<td>STK-10</td>
<td>Assessed for Rehabilitation</td>
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<td>VTE-1</td>
<td>Venous Thromboembolism Prophylaxis</td>
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<tr>
<td>VTE-2</td>
<td>Intensive Care Venous Thromboembolism Prophylaxis</td>
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<td>VTE-3</td>
<td>Venous Thromboembolism Patients with Anticoagulation Overlap Therapy</td>
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<td>VTE-4</td>
<td>Unfractionated Heparin</td>
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<tr>
<td>VTE-5</td>
<td>Venous Thromboembolism Discharge Instructions</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>VTE-6</td>
<td>Incidence Of Potentially - Preventable Venous Thromboembolism</td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>
eCQM Reporting Submission

Electronic Clinical Quality Measures (eCQM)
eCQM Reporting Diagram

Quality Measure Data Flow

MEDITECH Data Repository → eCQM Calculation Engine → CEHRT → Web → QRDA Files {VTE, ED, STK, AMI, SCIP,..} → QualityNet
eCQM Reporting Standards

- Introduction of universal identifier
  - Example: Venous Thromboembolism Patients with Anticoagulation Overlap Therapy
    - NQF# = 0373 (VTE-3)
    - eMeasure ID = CMS-73

- How do standardized nomenclature based code system work?
  - Using Quality Data Model (QDM) with HL7 QRDA (Quality Reporting Document Architecture)

- eCQM Library Specifications Published Annually
  - VTE-3 Example
# Venous Thromboembolism Prophylaxis

**eMeasure Title**
Venous Thromboembolism Prophylaxis

**eMeasure Identifier (Measure Authoring Tool)**
108

**eMeasure Version number**
4.0.000

**NQF Number**
0371

**GUID**
38b0b5ec-0f63-466f-8f63-2cd20dd1622

**Measurement Period**
January 1, 20XX through December 31, 20XX

**Measure Steward**
The Joint Commission

**Measure Developer**
The Joint Commission

**Endorsed By**
National Quality Forum

**Description**
This measure assesses the number of patients who received VTE prophylaxis or have documentation why no VTE prophylaxis was given the day of or the day after hospital admission or surgery end date for surgeries that start the day of or the day after hospital admission.

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**Disclaimer**
These performance measures are not clinical guidelines and do not establish a standard of medical care, and have not been tested for all potential applications. The measures and specifications are provided without warranty.

**Measure Scoring**
Proportion

**Measure Type**
Process

**Measure Item Count**
Encounter, Performed: Encounter Inpatient

**Stratification**
None

**Risk Adjustment**
None

**Rate Aggregation**
None

**Rationales**
Hospitalized patients at high-risk for VTE may develop an asymptomatic deep vein thrombosis (DVT), and die from pulmonary emboli (PE) even before the diagnosis is suspected. The majority of fatal events occur as sudden or abrupt death, underscoring the importance of prevention as the most critical action step for reducing death from PE (Geerts, et al. 2008).

The estimated annual incidence of deep-vein thrombosis (DVT) and pulmonary embolism (PE), known collectively as venous thromboembolism (VTE), is approximately 900,000 (Geerts, et al. 2008). Approximately two-thirds of cases of DVT or PE are associated with recent hospitalization. This is consistent with the 2001 report by The Agency for Healthcare Research and Quality (AHRQ). AHRQ indicates that "the appropriate application of effective preventive measures in hospitals has major potential for improving patient safety by reducing the incidence of venous thromboembolism" (Shojania, 2001).

Despite its proven effectiveness, rates of appropriate thromboprophylaxis remain low in both medical and surgical patients. A recent analysis from the ENOXSE survey, which evaluated prophylaxis rates in 17,084 major surgery patients, found that more than one third of patients at risk for VTE (38%) did not receive prophylaxis and that rates varied by surgery type (Cohen, et al., 2008).

In a review of evidence-based patient safety practices, the Agency for Healthcare Research and Quality defined thromboprophylaxis against VTE as the "number one patient safety practice" for hospitalized patients (Shojania, 2001). Updated "safe practices" published by the National Quality Forum (NQF) recommend routine evaluation of hospitalized patients for risk of VTE and use of appropriate prophylaxis (National Quality Forum, National Voluntary Consensus Standards for Prevention and Care of Venous Thromboembolism, 2006).

As noted by the ACCP, a vast number of randomized clinical trials provide irrefutable evidence that thromboprophylaxis reduces VTE events, and there are studies that have also shown that fatal PE is prevented by thromboprophylaxis (Geerts, et al. 2009).
Reconcile and Validate eCQMs

VTE-3 Reporting Example

eMeasure Identifier: CMS-73

Description:
This measure assesses the number of patients diagnosed with confirmed VTE who received an overlap of parenteral (intravenous [IV] or subcutaneous [subcu]) anticoagulation and warfarin therapy. For patients who received less than five days of overlap therapy, they should be discharged on both medications or have a reason for discontinuation of overlap therapy. Overlap therapy should be administered for at least five days with an international normalized ratio (INR) greater than or equal to 2 prior to discontinuation of the parenteral anticoagulation therapy, discharged on both medications or have a reason for discontinuation of overlap therapy.

Data criteria (QDM Data Elements):
"Medication, Administered: Warfarin" using "Warfarin RXNORM Value Set (2.16.840.1.113883.3.117.1.7.1.232)"
"Medication, Discharge not done: Medical Reason" using "Medical Reason SNOMEDCT Value Set (2.16.840.1.113883.3.117.1.7.1.473)"
"Medication, Discharge not done: Patient Refusal" using "Patient Refusal SNOMEDCT Value Set (2.16.840.1.113883.3.117.1.7.1.93)"
"Medication, Discharge: Parenteral Anticoagulant" using "Parenteral Anticoagulant RXNORM Value Set (2.16.840.1.113883.3.117.1.7.1.266)"
"Medication, Discharge: Parenteral anticoagulant ingredient specific" using "Parenteral anticoagulant ingredient specific RXNORM Value Set (2.16.840.1.113762.1.4.1021.4)"
"Medication, Order not done: Medical Reason" using "Medical Reason SNOMEDCT Value Set (2.16.840.1.113883.3.117.1.7.1.473)"
"Medication, Order not done: Patient Refusal" using "Patient Refusal SNOMEDCT Value Set (2.16.840.1.113883.3.117.1.7.1.93)"
VTE-3 Reporting Example

eMeasure Identifier: CMS108

Data criteria (QDM Data Elements):
"Medication, Administered: Warfarin" using "Warfarin RxNorm Value Set (2.16.840.1.113883.3.117.1.7.1.232)“

Value Set Table:

<table>
<thead>
<tr>
<th>ValueSetName</th>
<th>ValueSetID</th>
<th>Code</th>
<th>Description</th>
<th>Code System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warfarin</td>
<td>2.16.840.1.113883.3.117.1.7.1.232</td>
<td>855288</td>
<td>Warfarin Sodium 1000 Mg Oral Tablet</td>
<td>RXNORM</td>
</tr>
<tr>
<td>Warfarin</td>
<td>2.16.840.1.113883.3.117.1.7.1.232</td>
<td>855296</td>
<td>Warfarin Sodium 10 Mg Oral Tablet</td>
<td>RXNORM</td>
</tr>
<tr>
<td>Warfarin</td>
<td>2.16.840.1.113883.3.117.1.7.1.232</td>
<td>855302</td>
<td>Warfarin Sodium 2 Mg Oral Tablet</td>
<td>RXNORM</td>
</tr>
<tr>
<td>Warfarin</td>
<td>2.16.840.1.113883.3.117.1.7.1.232</td>
<td>855308</td>
<td>Warfarin Sodium 2 Mg/mL Injectable Solution</td>
<td>RXNORM</td>
</tr>
<tr>
<td>Warfarin</td>
<td>2.16.840.1.113883.3.117.1.7.1.232</td>
<td>855312</td>
<td>Warfarin Sodium 2.5 Mg Oral Tablet</td>
<td>RXNORM</td>
</tr>
<tr>
<td>Warfarin</td>
<td>2.16.840.1.113883.3.117.1.7.1.232</td>
<td>855318</td>
<td>Warfarin Sodium 3 Mg Oral Tablet</td>
<td>RXNORM</td>
</tr>
<tr>
<td>Warfarin</td>
<td>2.16.840.1.113883.3.117.1.7.1.232</td>
<td>855324</td>
<td>Warfarin Sodium 4 Mg Oral Tablet</td>
<td>RXNORM</td>
</tr>
<tr>
<td>Warfarin</td>
<td>2.16.840.1.113883.3.117.1.7.1.232</td>
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<td>Warfarin Sodium 5 Mg Oral Tablet</td>
<td>RXNORM</td>
</tr>
<tr>
<td>Warfarin</td>
<td>2.16.840.1.113883.3.117.1.7.1.232</td>
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<td>Warfarin Sodium 6 Mg Oral Tablet</td>
<td>RXNORM</td>
</tr>
<tr>
<td>Warfarin</td>
<td>2.16.840.1.113883.3.117.1.7.1.232</td>
<td>855344</td>
<td>Warfarin Sodium 7.5 Mg Oral Tablet</td>
<td>RXNORM</td>
</tr>
</tbody>
</table>

This shows a value set for a class of medications (Warfarin)
VTE-3 Reporting Example

eMeasure Identifier: CMS108

Data criteria (QDM Data Elements):
"Medication, Administered: Warfarin" using "Warfarin RxNorm Value Set (2.16.840.1.113883.3.117.1.7.1.232)"

Value Set Table:

<table>
<thead>
<tr>
<th>ValueSetName</th>
<th>ValueSetID</th>
<th>Code</th>
<th>Description</th>
<th>Code System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warfarin</td>
<td>2.16.840.1.113883.3.117.1.7.1.232</td>
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<tr>
<td>Warfarin</td>
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<td>Warfarin Sodium 10 MG Oral Tablet</td>
<td>RXNORM</td>
</tr>
<tr>
<td>Warfarin</td>
<td>2.16.840.1.113883.3.117.1.7.1.232</td>
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<td>Warfarin Sodium 2 MG Oral Tablet</td>
<td>RXNORM</td>
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<tr>
<td>Warfarin</td>
<td>2.16.840.1.113883.3.117.1.7.1.232</td>
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<td>Warfarin Sodium 4 MG Oral Tablet</td>
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<td>Warfarin Sodium 5 MG Oral Tablet</td>
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<td>855344</td>
<td>Warfarin Sodium 7.5 MG Oral Tablet</td>
<td>RXNORM</td>
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VisitID | Code | CodeSystem | ValueSetOID | Date Time | Value | Low Value | ValueSet Name |
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</tr>
</thead>
<tbody>
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<td>855332</td>
<td>RXNORM</td>
<td>2.16.840.1.113883.3.117.1.7.1.201</td>
<td>2012-04-01 17:00:00.000</td>
<td>ADMIN</td>
<td>2012-04-01 17:00:00.000</td>
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<td>2.16.840.1.113883.3.117.1.7.1.201</td>
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<td>ADMIN</td>
<td>2012-04-01 14:00:00.000</td>
<td>Warfarin</td>
</tr>
</tbody>
</table>
VTE-3 Reporting Example

**Data criteria (QDM Data Elements):**
- "Medication, Administered: Warfarin" using "Warfarin RXNORM Value Set (2.16.840.1.113883.3.117.1.7.1.232)"
- "Medication, Discharge not done: Medical Reason" using "Medical Reason SNOMEDCT Value Set (2.16.840.1.113883.3.117.1.7.1.473)"
- "Medication, Discharge not done: Patient Refusal" using "Patient Refusal SNOMEDCT Value Set (2.16.840.1.113883.3.117.1.7.1.93)"
- "Medication, Discharge: Parenteral Anticoagulant" using "Parenteral Anticoagulant RXNORM Value Set (2.16.840.1.113883.3.117.1.7.1.266)"
- "Medication, Discharge: Parenteral anticoagulant ingredient specific" using "Parenteral anticoagulant ingredient specific RXNORM Value Set (2.16.840.1.113762.1.4.1021.4)"
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**Table:**

<table>
<thead>
<tr>
<th>VisitID</th>
<th>Code</th>
<th>CodeSystem</th>
<th>ValueSetOID</th>
<th>Date/Time</th>
<th>Value</th>
<th>LowValue</th>
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<td>2.16.840.1.113883.3.117.1.7.1.201</td>
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<td>2012-04-02 00:08:28.000</td>
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<td>RXNORM</td>
<td>2.16.840.1.113883.3.117.1.7.1.232</td>
<td>2012-04-01 14:00:00.000</td>
<td>ADMIN</td>
<td></td>
<td>Warfarin</td>
</tr>
</tbody>
</table>
# VTE-3 Reporting Example

## Clinical Quality Measures
### VTE Summary
**From:** 10/1/2013  **Thru:** 9/30/2014

<table>
<thead>
<tr>
<th>Measure</th>
<th>Measure Description</th>
<th>Initial Population</th>
<th>Denominator</th>
<th>Denominator Exclusions</th>
<th>Numerator</th>
<th>Exceptions</th>
<th>Performance Not Met</th>
<th>Performance Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>VTE-1</td>
<td>VTE prophylaxis within 24 hours of arrival (including surgeries)</td>
<td>12</td>
<td>12</td>
<td>9</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>33%</td>
</tr>
<tr>
<td>VTE-2</td>
<td>Intensive Care Unit VTE prophylaxis given (include why not if applicable)</td>
<td>12</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>50%</td>
</tr>
<tr>
<td>VTE-3</td>
<td>Anticoagulation overlap therapy</td>
<td>5</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>33%</td>
</tr>
<tr>
<td>VTE-4</td>
<td>Platelet monitoring on unfractionated heparin</td>
<td>5</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td></td>
<td>33%</td>
</tr>
<tr>
<td>VTE-5</td>
<td>VTE discharge instructions</td>
<td>5</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>0</td>
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<td>33%</td>
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<tr>
<td>VTE-6</td>
<td>Incidence of potentially preventable VTE</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td></td>
<td>50%</td>
</tr>
</tbody>
</table>
VTE-3 Reporting Example

Performance Not Met
VTE-3: Anticoagulation overlap therapy
From: 10/1/2013 Thru: 9/30/2014

<table>
<thead>
<tr>
<th>Unit #</th>
<th>Account #</th>
<th>Admit Date</th>
<th>Discharge Date</th>
<th>DOB</th>
<th>LOS</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>X0042X00012894242</td>
<td>M0021M000674821</td>
<td>03/12/2014 1431</td>
<td>03/20/2014 1431</td>
<td>02/10/1982</td>
<td>8</td>
<td>NA4W</td>
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<tr>
<td>X0073X00012900973</td>
<td>M0019M000686519</td>
<td>03/13/2014 1310</td>
<td>03/25/2014 1310</td>
<td>02/10/1982</td>
<td>12</td>
<td>NA4W</td>
</tr>
</tbody>
</table>

Run Date: 5/23/2015 3:24:31 PM
# VTE-3 Reporting Example

**Acmeeware Medical Center**

**Measure Summary Report**

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient</td>
<td>RUTH ZTESTELL</td>
</tr>
<tr>
<td>Account</td>
<td>ACT417174</td>
</tr>
<tr>
<td>Unit #</td>
<td>UNT05948</td>
</tr>
<tr>
<td>Measure</td>
<td>VTE-3</td>
</tr>
<tr>
<td>Description</td>
<td>Anticoagulation overlap therapy</td>
</tr>
</tbody>
</table>

**Population**

- □ VTE Diagnostic Test (result: 'VTE Confirmed') and Warfarin with the following criteria:
  - OR □ VTE Diagnostic Test (result: 'VTE Confirmed') during or <= 2 days before Inpatient Encounter
  - OR □ VTE Diagnostic Test (result: 'VTE Confirmed') during Inpatient Encounter

**Denominator**

- □ VTE Diagnostic Test (result: 'VTE Confirmed') during or <= 2 days before Inpatient Encounter

**Exclusion**

- □ If had ED Visit, diagnosis active in ED, otherwise diagnosis active as Inpatient
  - OR □ Inpatient Encounter: admission datetime <= 1 hour(s) starts after ED Visit (departure datetime)
  - AND □ Emergency Department Visit
  - AND □ Inpatient Encounter
  - AND □ admission datetime <= 1 hour(s) starts after after ED Visit (departure datetime)

**Numerator**

- □ VTE Diagnostic Test (result: 'VTE Confirmed') and Medication, Administered: Warfarin during or <= 2 days before Inpatient Encounter
  - AND □ VTE Diagnostic Test (result: 'VTE Confirmed') during or <= 2 days before ED Visit or during Inpatient Encounter
  - OR □ VTE Diagnostic Test (result: 'VTE Confirmed') during ED Visit
  - OR □ VTE Diagnostic Test (result: 'VTE Confirmed') <= 2 days before ED Visit
  - OR □ VTE Diagnostic Test (result: 'VTE Confirmed') during Inpatient Encounter
  - AND □ No Medication, Administered: Warfarin during or <= 2 days before ED Visit
  - OR □ Medication, Administered: Warfarin during ED Visit
  - OR □ Medication, Administered: Warfarin <= 2 days before ED Visit

**Exception**

- □ Exclusion
- □ Numerator
- □ Exception
VTE-3 Reporting Example

HL7 QRDA (XML File) Snippet for Patient Visit that meets NQF#: 0371

```xml
<entry>
  <act classCode="ACT" moodCode="EVN">
    <!-- Medication, Administered template -->
    <templateId root="2.16.840.1.113883.10.20.24.3.42"/>
    <id root="1.3.6.1.4.1.115" extension="51df41e9b490d176750000bc"/>
    <code code="416118004" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" display name="Administration"/>
    <statusCode code="completed"/>
    <effectiveTime xsi:type="IVL_TS">
      <low value='20120401170000'/>
      <high value='20120401170000'/>
    </effectiveTime>
  </actRelationship typeCode="COMP">
    <substanceAdministration classCode="SBADM" moodCode="EVN">
      <!-- Medication Activity (consolidation) template -->
      <templateId root="2.16.840.1.113883.10.20.22.4.16"/>
      <id root="e2c2bd79-e9b9-0130-a501-22000aa43ef1"/>
      <text>Medication, Administered: Warfarin (Code List: 2.16.840.1.113883.3.117.1.7.1.232)</text>
      <statusCode code="completed"/>
      <effectiveTime xsi:type="IVL_TS">
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```
Opportunities and Challenges

- CQM reporting is the focus of the present and future
  - Electronic submission will become more pervasive

- Opportunities and Challenges Exist
  - Patient Population Tracking
  - Concurrent Review for Nursing Quality
  - Clinical Care Team Alerting
  - Custom Report Development

- Prepare your teams and systems now
Discussion, Q&A

Come see our other MUSE sessions!

- Tuesday 5/31 (1:00 – 3:30)
  - 801 - The Alphabet Soup of Clinical Quality Measure Reporting Initiatives

- Wednesday 6/1 (1:30 – 2:20)
  - 1057 - Readmission Reduction Program at Northwestern Medical Center (Tampa 3)

- Thursday 6/2
  - (9:15 – 10:10) 1096 - Data Repository Upgrades to 6.1 (Osceola 2)
  - (11:15 – 12:10) 1094 - How to Successfully Submit eCQMs Electronically (Daytona 1)
  - (3:30 – 4:25) 1032 - In a Galaxy NOT So Far, Far Away ... eCQMs (Daytona 1)