The Role of the Compliance Department in Today’s Challenging Quality Measurement Reporting Environment

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Today’s speakers

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— She works with clients in areas of health information management, coding, clinical documentation integrity, healthcare compliance, accreditation and the hospital revenue cycle processes
— She has developed auditing and monitoring tools to document facility compliance activities including areas such as Two-Midnight rule, medical research billing compliance and OIG sanctions checks
Measuring the Value and Quality of Care

Why focus on quality reporting?

Healthcare quality and efficiency measures are used by federal and state regulatory agencies, as well as others, to determine the effectiveness of an organization’s patient care delivery.

To hospitals, increased attention on quality reporting provides:
- Insights as to gaps for internal improvement
- Differentiation to customers
- Higher revenues for higher quality services
- A need for credible, relevant, complete and accurate quality measures

Clear evidence of the reliability of quality measures is, and will be, increasingly important as the focus on the financial impact of quality outcomes to healthcare organizations increases.
Measuring the Value and Quality of Care

Measuring Quality of Care Today

CMS Quality Reporting Programs & Quality Initiatives

- Value Modifier (VM) Program
- Quality Improvement Organizations
- Inpatient Rehabilitation Facilities (IRF) Quality Reporting Program (QRP)
- Nursing Home Quality Initiative
- Post-Acute Care Quality Initiatives
- Hospital Value-Based Purchasing (VBP) Program
- Hospital Readmissions Reduction (HRR) Program
- Hospital Outpatient Quality Reporting (OQR)
- Appropriate Use Criteria Program
- Long-Term Care Hospital (LTCH) Quality Reporting (QRP)
- Physician Quality Reporting System (PQRS)
- Hospice Quality Reporting Program (HQR)
- Hospital Inpatient Quality Reporting (IQR)

Source: https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/MMS/Additional-Quality-Resources.html

Measuring the Value and Quality of Care

Continued Innovation through the Quality Payment Program

Medicare Access and CHIP Reauthorization Act (MACRA)

- Quality Payment Program (QPP)
- Medicare Incentive Payment System (MIPS)

- Value-Based Modifier (VM) Program
- Meaningful Use (MU) Program
- Physician Quality Reporting System (PQRS)

Medicare Incentive Payment System (MIPS)

Source: https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/MMS/Additional-Quality-Resources.html
# MIPS Reporting

## Data Submission Mechanisms

<table>
<thead>
<tr>
<th>Performance Category</th>
<th>Individual Reporting</th>
<th>Group Reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Quality</strong></td>
<td>• QCDR</td>
<td>• QCDR</td>
</tr>
<tr>
<td></td>
<td>• Qualified Registry</td>
<td>• Qualified Registry</td>
</tr>
<tr>
<td></td>
<td>• EHR</td>
<td>• EHR</td>
</tr>
<tr>
<td></td>
<td>• Administrative Claims (no submission required)</td>
<td>• CMS Web Interface (groups of 25 or more)</td>
</tr>
<tr>
<td></td>
<td>• Claims</td>
<td>• CMS-approved survey vendor for CAHPS for MIPS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Administrative Claims (no submission required)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Claims</td>
</tr>
<tr>
<td><strong>Resource Use</strong></td>
<td>• Administrative Claims (no submission required)</td>
<td>• Administrative Claims (no submission required)</td>
</tr>
<tr>
<td><strong>Advancing Care Information</strong></td>
<td>• Attestation</td>
<td>• Attestation</td>
</tr>
<tr>
<td></td>
<td>• QCDR</td>
<td>• QCDR</td>
</tr>
<tr>
<td></td>
<td>• Qualified Registry</td>
<td>• Qualified registry</td>
</tr>
<tr>
<td></td>
<td>• EHR</td>
<td>• EHR</td>
</tr>
<tr>
<td></td>
<td>• CMS Web Interface (groups of 25 or more)</td>
<td>• CMS Web Interface (groups of 25 or more)</td>
</tr>
<tr>
<td><strong>Clinical Practice Improvement Activities</strong></td>
<td>• Attestation</td>
<td>• Attestation</td>
</tr>
<tr>
<td></td>
<td>• QCDR</td>
<td>• QCDR</td>
</tr>
<tr>
<td></td>
<td>• Qualified Registry</td>
<td>• Qualified Registry</td>
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<tr>
<td></td>
<td>• EHR</td>
<td>• EHR</td>
</tr>
<tr>
<td></td>
<td>• Administrative claims</td>
<td>• CMS Web Interface (groups of 25 or more)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Administrative Claims if feasible</td>
</tr>
</tbody>
</table>

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**Overview of the CMS star ratings and quality performance metrics**

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Overview of the CMS Star Rating Methodology for Providers

Step 1: Select Measures

Hospital Compare Measure
- Measure 1
- Measure 2
- Measure 61
- Measure 62

Step 2: Group Measures
- Mortality
- Safety of Care
- Readmission
- Patient Experience
- Effectiveness of Care
- Timeliness of Care
- Efficient Use of Imaging

Step 3: Calculate Group Score
- Mortality Group Score
- Safety of Care Group Score
- Readmission Group Score
- Patient Experience Group Score
- Effectiveness of Care Group Score
- Timeliness Group Score
- Imaging Group Score

Step 4: Generate Hospital Summary Score

Step 5: Calculating Star Ratings

Step 1: Selecting and Standardizing Measures

Quality measure results include many different types of scoring information (e.g. times, percentages, rates) and therefore need to be:

- Standardized – By calculating a z-score for each measure the measures become comparable
  - The difference between an individual hospital’s score and the overall mean score for all hospitals divided by the standard deviation for all hospitals

- Adjusted for Outliers (Winsorization) – Set all scores to within 3 standard deviations of the mean

Source: CMS.
Step 2: Group Measures (as of July 2016)

Mortality Measures (7 measures)
Safety of Care Measures (8 measures)
Readmission Measures (8 measures)
Patient Experience Measures (11 measures)
Effectiveness of Care Measures (18 measures)
Timeliness of Care Measures (7 measures)
Efficient Use of Medical Imaging Measures (5 measures)

These seven groups of measures are closely aligned with the Value-based Purchasing Program and the categories included on Hospital Compare.

By grouping measures into these categories, it will allow specific measures within the groups to be added or removed from the star ratings in the future.

Step 3: Calculate Group Scores

CMS uses an analytical concept called Latent Variable Models to calculate each group score. The reasons that these models are used are because:

— Quality of care is a hard to define variable to predict
— Each hospital may report different amount of cases in each measure
— Measures with larger amounts of cases are more likely to predict overall quality of care

Examples of latent variables from the field of economics include:

— quality of life
— business confidence
— morale
— happiness and conservatism

These are all variables which cannot be measured directly. But linking these latent variables to other, observable variables, the values of the latent variables can be inferred from measurements of the observable variables.

Quality of life is a latent variable which cannot be measured directly so observable variables are used to infer quality of life.

Observable variables to measure quality of life include:

— wealth
— employment
— environment
— physical and mental health
— education
— recreation and leisure time
— social belonging

Source: CMS.
Step 4: Generate Summary Score

The following criteria were used to determine weighting:
- Measure importance
- Consistency
- Policy Priorities
- Stakeholder input

Weighted Average: Hospital Summary Score

Step 5: Assigning a Star Rating

CMS uses a statistical concept call k-Means clustering to translate each hospital's weighted score into an overall star rating.
- Two random data points are selected and the distance between those points and all other points is calculated to see which one it is closer to (in the case of the star ratings they select 5 points)
- The average distance from those points to all other points in the group is calculated and becomes the new central point
- This process is iterated until the central points are determined to be the minimum distance between the central point and all points within that group.
Step 5: Assigning a Star Rating

<table>
<thead>
<tr>
<th>Rating</th>
<th>Number of Hospitals</th>
<th>Percentage of Hospitals</th>
<th>Summary Score Range in Cluster</th>
</tr>
</thead>
<tbody>
<tr>
<td>★★★★★</td>
<td>100</td>
<td>2.73%</td>
<td>(0.85, 2.06)</td>
</tr>
<tr>
<td>★★★★★</td>
<td>918</td>
<td>25.10%</td>
<td>(0.23, 0.85)</td>
</tr>
<tr>
<td>★★★★</td>
<td>1,777</td>
<td>48.58%</td>
<td>(-0.35, 0.23)</td>
</tr>
<tr>
<td>★★★</td>
<td>728</td>
<td>19.90%</td>
<td>(-1.00, -0.35)</td>
</tr>
<tr>
<td>★★</td>
<td>135</td>
<td>3.69%</td>
<td>(-1.97, -1.01)</td>
</tr>
</tbody>
</table>

Source: CMS.

The star ratings are aligned with incentive payments tied to the underlying measures.

<table>
<thead>
<tr>
<th>Star Rating</th>
<th>Average HAC % (Penalty) / Reward</th>
<th>Average VBP % (Penalty) / Reward</th>
<th>Average Readmission % (Penalty) / Reward</th>
<th>Total Average % (Penalty) / Reward</th>
</tr>
</thead>
<tbody>
<tr>
<td>★</td>
<td>(0.5)%</td>
<td>(0.5)%</td>
<td>(0.8)%</td>
<td>(1.8)%</td>
</tr>
<tr>
<td>★★</td>
<td>(0.3)%</td>
<td>(0.2)%</td>
<td>(0.7)%</td>
<td>(1.2)%</td>
</tr>
<tr>
<td>★★★</td>
<td>(0.2)%</td>
<td>0.2%</td>
<td>(0.5)%</td>
<td>(0.5)%</td>
</tr>
<tr>
<td>★★★★</td>
<td>(0.2)%</td>
<td>0.5%</td>
<td>(0.4)%</td>
<td>(0.1)%</td>
</tr>
<tr>
<td>★★★★★</td>
<td>(0.1)%</td>
<td>1.0%</td>
<td>(0.2)%</td>
<td>0.7%</td>
</tr>
</tbody>
</table>

Source: CMS.
Understand the Quality Reporting Program

Key Questions

- Where will work be performed?
- How many locations should provide quality reporting data?
- How will the Quality Reporting program be structured?
- How will activities be monitored across multiple services and locations?
- How will reporting relationships be structured (Chief Quality Officer, Medical, Nursing or Operating Officer; Service Line; Department)?
- What are the core competencies required of the Quality Reporting professionals to successfully do the work (Certifications/License/Skills/Knowledge/Abilities)?
- How will performance of these competencies be measured?
- What are the value adding roles that the Quality Reporting team can perform?
- What are the relationships in the flow of work from one process to another?
- What are the clinical documentation, checklist and evidence-based protocols/guidelines that are followed?
- What are the sources of information for the EMR (electronic medical record)?
- Does the EMR platform support the quality reporting program?
- Are there automated processes (workflow or automated aggregation and calculation capabilities)?
- Are reporting guidelines and definitions followed?
- Are there data transparency?
- Is the EMR platform aligned to the business and reporting structure?
- Are reporting cycles as efficient as possible?
- Are current reports providing adequate business value and achieving reporting requirements?
- Are there adequate controls mitigating business risks?
- Are goals and targets approved by the Board and Senior Leadership?
- Are the data and any action plans to achieve metrics compliance presented to the Board and Senior Leadership?
Governance, Risk & Control Tools

Overview of Internal Audit Project Approach
Collaboration Plan with Compliance

Understand the Quality Reporting Program

Process Decomposition - Key Phases Defined

Performance-based Quality Reporting represents a key process whereby events are recorded and compiled for internal and external reporting, compliance and analysis purposes. The major phases of the Quality Reporting Process are as follows:

<table>
<thead>
<tr>
<th>Strategic Planning</th>
<th>Program Scoping</th>
<th>Execution Management</th>
<th>Process Governance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strategic Planning</strong></td>
<td>A systematic method used to identify an organization’s long-term goals and to lay out the best approach for achieving those goals (this includes resource projections for key initiatives supporting the organization’s strategy). Planning encompasses both external and internal factors that span the entire organization.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Program Scoping</strong></td>
<td>The process whereby an organization’s strategic plan is translated into specific quality targets. The level of detail tends to be greater than in planning activities. Once in place, budgets are compared against actual results and specific accountabilities are typically established at various levels within the organization.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Execution Management</strong></td>
<td>The process of combining and displaying/distributing periodic business results for analysis—these results are made available to management to validate strategy, measure performance and guide business decision making.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Process Governance</strong></td>
<td>Includes program capability management as well as oversight, tracking and day-to-day management activities, including implementing and maintaining a formal continuous improvement program. Also includes managing system maintenance for the IT systems used for quality reporting.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Internal Audit Project Workplan Considerations

<table>
<thead>
<tr>
<th>Understand Quality Reporting Program Objectives, Policies, and Procedures</th>
<th>Define Detailed Project Scope &amp; Document Process, Risks, and Controls</th>
<th>Identify &amp; Evaluate Internal Control Activities</th>
<th>Assess Control Deficiencies and Provide Recommendations</th>
<th>Establish, Maintain &amp; Improve Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Conduct process-owner interviews to confirm understanding of the quality reporting program objectives, initiatives, key stakeholders, roles &amp; responsibilities, etc.</td>
<td>• Confirm quality reporting program understanding; including key business process documentation, process level risks, control activities (including IT focus) with project sponsor / stakeholder(s)</td>
<td>• Conduct a gap analysis of key quality reporting program and process-level risks</td>
<td>• Develop remediation strategy with client to close gaps identified in the assessment process</td>
<td>• Update policies and procedures</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Prepare summary of findings and preliminary recommendations</td>
<td></td>
<td>• Establish process to re-assess goal achievement and reassessment process on an annual basis</td>
</tr>
</tbody>
</table>
### Clinical Controls

**Major Quality Outcomes Measurement Organizations**

<table>
<thead>
<tr>
<th>Centers for Medicare and Medicaid</th>
<th>The Joint Commission</th>
<th>Various Specialty Area or Clinical Area Accreditations</th>
<th>US News &amp; World Reports</th>
<th>LeapFrog</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple mandated regulatory reporting that include Hospital Compare, Value Based Purchasing, Hospital Acquired Conditions, Readmission Reduction</td>
<td>Various types of accreditations may be obtained based on resource and goals of the healthcare setting</td>
<td>Based on need or healthcare setting goals there are multiple types of accreditations such as ACR, NSQIP</td>
<td>Annual ranking of hospitals published to consumers</td>
<td>Hospital Safety Score published annually to consumers</td>
</tr>
</tbody>
</table>

**Source of Data:**
- Various government required reporting methods

**Source of Data:**
- Various government required reporting methods

**Source of Data:**
- Healthcare organization self reports
- TJC conducts site visits on a routine schedule

**Source of Data:**
- Healthcare organization self reports
- Agency conducts site visits on a routine schedule

### Assumptions and Our Viewpoints

**Assumptions**
- All hospitals focus on and report on “quality”, but the approaches, priorities, definitions, and reporting differ across the country
- The hospital strategic goals are aligned to the quality reporting objectives

**Viewpoint #1 – The Core Metrics**

A core number of measurable outcomes are consistent across the major quality reporting services and will drive a large portion of real value in the future

**Why does this matter?**
- Improved patient outcomes
- Enhanced reputation and brand for clinical quality
- Improved reimbursement through CMS’ value-based payment and other state-specific measures
- Opportunities for physician alignment through shared savings and pay-for-outcome performance models

**Viewpoint #2 – Clinical Data Integrity**

Regardless of the measures chosen, the underlying data may not support the reported “quality”, which can have various implications for hospitals

**Why does this matter?**
- Assurance around appropriateness of reporting
- Enhanced compliance under increased regulatory scrutiny
Aligning the Quality Vision

Case Study: Large Academic Medical Center

Observations – The Core Metrics

- A review of national state quality ranking program methodologies reflect the most consistently used outcomes are mortality and readmission measures for AMI, Heart Failure, and Pneumonia.
- Patient safety and hospital-acquired conditions are key indicators which influence mortality and readmission measures
  - Caveat: Based on a review of the rating methodologies and a cursory review of Medicare claims data

Observations – Clinical Data Integrity

- Metrics used to measure quality outcomes appear to be directly related to a hospital’s ability to accurately reflect co-morbidities (through secondary diagnoses) and present-on-admission status of the patient while in the hospital.
- Analyses related to large academic medical center Medicare claims data indicates the potential that the claims data does not support medical centers high-acuity patient population
### Aligning the Quality Vision

#### Case Study: Supporting Analysis – Observation on the Core Metrics

<table>
<thead>
<tr>
<th>Correlation of Metrics in Outcomes Measurement Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Category</strong></td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td><strong>Patient Survival</strong></td>
</tr>
<tr>
<td><strong>In-hospital complications</strong></td>
</tr>
<tr>
<td><strong>Patient Safety Indicators</strong></td>
</tr>
</tbody>
</table>

### Targeted conditions: Acute Myocardial Infarction (AMI)

CMS is linking cardiac episode or bundled payment model for acute myocardial infarction (MS-DRG 280-282, 246-251) to quality measures

**Acute Myocardial Infarction (AMI) (aka heart attack):** Commonly known as a heart attack, acute myocardial infarction (AMI) occurs when the blood flow that brings oxygen to the heart muscle is severely reduced or cut off completely. This happens because coronary arteries that supply the heart muscle with blood flow can slowly become narrowed from a buildup of fat, cholesterol and other substances that together are called plaque.

<table>
<thead>
<tr>
<th>Table 1: Quality reporting measures for AMI</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Quality measure</strong></td>
</tr>
<tr>
<td>MORT-30-AMI (NQF #0230)</td>
</tr>
<tr>
<td>AMI Excess Days</td>
</tr>
<tr>
<td>Hybrid AMI Mortality (NQF #2473)</td>
</tr>
<tr>
<td>HCAHPS Survey (NQF #0166)</td>
</tr>
</tbody>
</table>
Targeted conditions: Overview of AMI

— About 720,000 people in the U.S. suffer heart attacks each year, with an average cost per episode of $24,200

— Complications in cardiac care can lead to increased risk of readmission, length of stay, increases in cost and utilization of resources and mortality

— Risk factors for AMI:
  — Age: The majority of people who die of coronary heart disease are 65 or older.
  — Smoking
  — High LDL cholesterol
  — Diabetes

<table>
<thead>
<tr>
<th>AMI</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length of Stay (LOS)</td>
<td>4.6</td>
</tr>
<tr>
<td>30-day Readmission Rate</td>
<td>19.9%</td>
</tr>
<tr>
<td>Inpatient Cost</td>
<td>$24,200</td>
</tr>
</tbody>
</table>

Source: AHRQ, HCUP, Statistical Brief #172: Conditions With the Largest Number of Adult Hospital Readmissions by Payer, 2011

Visualization Across the Continuum
Acute MI – Documentation and Coding

Non-ST elevation, Non Q-wave, ST elevation MI, Other specified, Unspecified – all terms related to “type” = acute MI

<table>
<thead>
<tr>
<th>Diagnostic Evidence</th>
<th>Treatment and Monitoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Signs, symptoms, and diagnostic criteria for evidence of a possible AMI:</td>
<td>— Diagnostic Anti-thrombotic treatment</td>
</tr>
<tr>
<td>— Chest pain (angina), SOB, “squeezing sensation”, n/v, cough, dizziness, “impending doom”, anxiety, sweating (may be profuse), may have no chest discomfort</td>
<td>— Telemetry monitoring</td>
</tr>
<tr>
<td>— Troponin or Cardiac Enzymes</td>
<td>— Heparin / ASA in combination with platelet inhibitor</td>
</tr>
<tr>
<td>— EKG changes</td>
<td>— Nitrates (Nitroglycerin)</td>
</tr>
<tr>
<td>Visible MI within last 4 weeks</td>
<td>— Beta-Blockers</td>
</tr>
<tr>
<td></td>
<td>— Oxygen</td>
</tr>
<tr>
<td></td>
<td>— MSO4</td>
</tr>
<tr>
<td></td>
<td>— ACE-inhibitors or ARBs</td>
</tr>
</tbody>
</table>

Evidence

Case Study: Discussion

Potential Root Cause

Issues in quality reporting of AMI

Clinical documentation supportive of physician treating a possible / probably AMI (as noted by coding rules for “within 4 weeks”) and coded/billed to AMI

— Insufficient communication with physicians, nurses, coding teams
— QI definitions and clinical guidelines without collaboration with CDI
— Diminished importance of clinical documentation process in clinical governance
— Potential for mixed messages to patient on actual diagnoses
— Siloes between existing CDI team and QI resulting in lack of coordinated effort around most impactful measures

Lack of integration of among the clinical, surveillance, and documentation/coding definitions and reporting requirements

Potential loss of revenue vs. penalty for QI measures

Lack of collaboration and knowledge sharing amongst the various teams (e.g. QA/PI, coding, CDI, physicians, infection prevention and control, Marketing)
The Role of the Compliance Department: The Chief Compliance Officer

Let’s Review:
The Seven Fundamental Elements of an Effective Compliance Program

1. Implementing written policies, procedures and standards of conduct.
2. Designating a compliance officer and compliance committee.
3. Conducting effective training and education.
4. Developing effective lines of communication.
5. Conducting internal monitoring and auditing.
7. Responding promptly to detected offenses and undertaking corrective action.

“The Seven Elements of a compliance program are important individually, but are most effective on an interdependent basis.” CMS
Let's Review:

The Role of the Compliance Officer

Healthcare compliance officers have very important responsibilities in a healthcare organization.

- oversee (usually through a compliance committee) practice and policy standards that can be enforced with disciplinary guidelines that are made known to everyone in the practice.
- address issues concerning individual(s) that have been sanctioned.
  - Including conducting prompt internal investigations, taking corrective action, and reporting findings to the government.
- act as liaisons between the board of directors and the government, playing a major role in deciding what policies the organization adopts.
- create programs on different parts of the compliance program to educate employees and management on the rules so they meet the standards that have been put in place.
- keep up with all the new regulatory rules that are created because organizations may be required to adopt them or to amend the old rules already in place.

Let's Review:

Creating A Culture of Compliance

Five Everyday Tips for Compliance

1. Make compliance plans a priority now and continually update as priorities shift.
2. Know your fraud and abuse risk areas by managing process for regulatory updates.
3. Manage your financial relationships.
4. Just because your competitor is doing something doesn’t mean you can or should.
   Call 1-800-HHS-TIPS to report suspect practices.
5. When in doubt, ask for assistance.
Auditing and Monitoring

— Periodic audits undertaken in order to identify deficiencies in operations, particularly with regard to the claim development and submission process.

— The Corporate Compliance Officer shall establish appropriate procedures for conducting such audits and utilize a risk assessment process to identify and prioritize the areas that pose the greatest risks for compliance violations.

— The Corporate Compliance Officer shall develop an annual audit work plan that lists the risk areas to be audited and monitored for each fiscal year.

Mapping Root Cause

<table>
<thead>
<tr>
<th>Pre-Arrival</th>
<th>Arrival</th>
<th>Delivery of Care, Service Integrity and Documentation</th>
<th>Post Care and Financial Services</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Information

Technology

Human Capital Management

Regulatory Compliance

Culture
Opportunities for clinical improvement: Establish a standard of care

The standard of care embodies the evidence-based pathway, and requires a process of definition, consensus and approval, and monitoring

<table>
<thead>
<tr>
<th>Define</th>
<th>Obtain Consensus</th>
<th>Monitor and Follow-up</th>
</tr>
</thead>
<tbody>
<tr>
<td>Define a pathway based upon target LOS, timing of interventions and medical milestones which target clinical outcomes; order sets and protocols flow from the pathway</td>
<td>Demonstrate formal commitment via approval from governing bodies of the medical staff, nursing staff, and hospital senior leadership</td>
<td>Establish accountability metrics and processes, and concurrent processes of care versus retrospective processes</td>
</tr>
<tr>
<td>Maintain formal reporting of outcome and accountability metrics to ensure compliance</td>
<td>Pathway and medical milestones must be concurrently used to manage both delivery of care, and progression of care</td>
<td>Unwarranted variations should be concurrently managed through an escalation process</td>
</tr>
</tbody>
</table>

Emphasizing standards of care: Leading practices for AMI

1. Diagnosis and Assessment: Perform a clinical examination, physical and necessary tests and screenings. Collect appropriate blood work including measurements of serum natriuretic peptides and echocardiography within 48 hours of admission

2. Treatment Pre-stabilization: Determine whether patient needs pharmacological or non-pharmacological treatment. Closely monitor the person's renal function, weight and urine output during diuretic therapy. Discuss with the person the best strategies of coping with an increased urine output

3. Treatment Post-stabilization: Determine if beta-blocker treatment is necessary based on vital signs and symptoms or other angiotension-converting enzyme inhibitor. Closely monitor the person's renal function, electrolytes, heart rate, blood pressure and overall clinical status during treatment and ensure that the person's condition is stable for typically 48 hours after starting or restarting beta-blockers and before discharging from hospital.

4. Post-discharge Rehabilitation & Follow-up Care: Schedule follow-up clinical assessment with a member of the specialist heart failure team within 2 weeks of the person being discharged from hospital. Continue ongoing care management in primary care, including ongoing monitoring and care provided by the multidisciplinary team and communicate information about the patient’s condition, treatment and prognosis

Source: Modified from IHI Clinical Pathway; IHI and other existing materials
Organizational self-assessment

High maturity organizations have a ‘population health’ focus, which means they look beyond their ‘four walls’; these organizations typically consider the following:

- What is our organization’s understanding of the quality metrics that drive payment?
- What are our current gaps and processes within our organization that are hindering good outcomes?
- What are our clinical pathways, order sets, protocols, and metrics that guide patient care through the acute and post-acute episodes of care?
- How do we use patient data from the EMR to facilitate the care of the patient?
- What is our current care management structure, and how does it focus on coordinating transitions of care, driving quality, and reducing readmissions through all patient care settings?
- How does the Interdisciplinary Care Coordination process use medical milestones to foster efficient movement and transitions through the appropriate sites of service back to home and the community?
- How does Clinical Variation Management drive increased quality and safety, improve clinical outcomes, and ensure medically appropriate care and resource utilization?

Q&A

Thank You