The Physician Advisor's Role in Quality Initiatives

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Central PA ACDIS Meeting

Learning Objectives

- Define quality initiatives.
- Define Patient Safety Indicators (PSIs), understand the review process and by review how it can result in quality initiatives.
- Identify the process of pre-bill mortality reviews to capture risk factors and optimize the severity of illness and risk of mortality.
- Understand how interdisciplinary rounds can result in improvement in patient safety and quality of care.

Disclosure

- I have no actual or potential conflict of interest in relation to this presentation.

PSHMC Physician Advisor Quality Initiatives

- Definition:
  - Quality improvements undertaken to improve the quality and or safety of patient care within Milton S. Hershey Medical Center.
- Quality Initiatives:
  - Patient Safety Indicators (PSIs)
  - Risk adjusted mortality
  - Hospital-Acquired Conditions (HAC) reduction program

Patient Safety Indicators

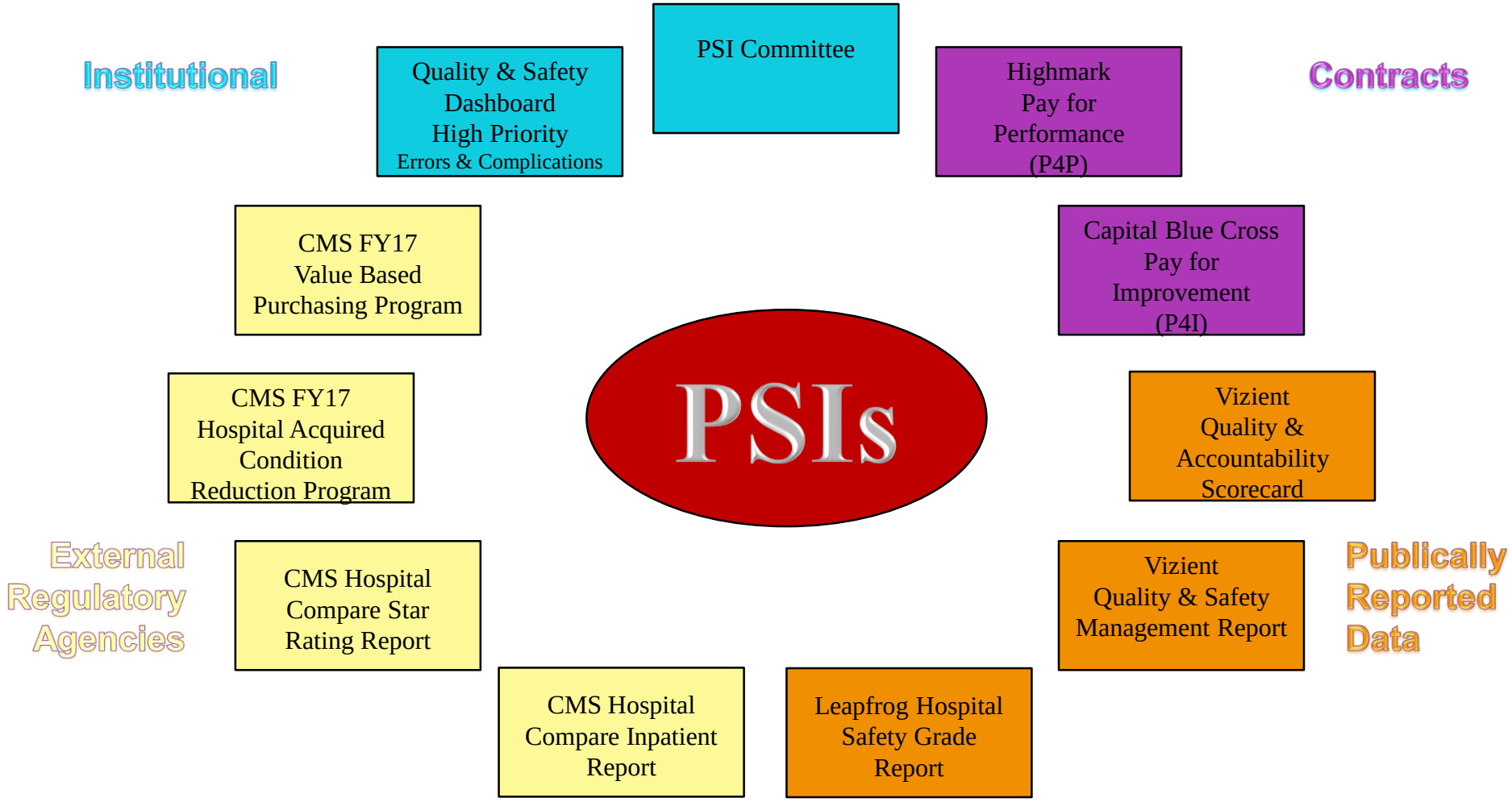
- Set of indicators developed by the Agency for Healthcare Research and Quality (AHRQ) to provide information on potential preventable complications and adverse events following surgeries, procedures, and childbirth.
- Used to help hospitals identify potential adverse events that might need further study.
- Used for public reporting.

Reference: https://qualityindicators.ahrq.gov/Modules/psi_resources.aspx

Patient Safety Indicators

- By using administrative data they provide the opportunity to assess the incidence of adverse events and complications from the discharge record.
- Have inclusion/exclusion criteria for complications that may represent patient safety events.
- PSHMC’s goal is to recognize these unintended adverse events, learn from them and take action to prevent future events when possible.

PSI Reporting



PSI-90 Composite

- PSI 03 Pressure Ulcer
- PSI 06 Iatrogenic Pneumothorax
- PSI 08 In-Hospital Fall With Hip Fracture
- PSI 09 Perioperative Hemorrhage or Hematoma
- PSI 10 Postoperative Acute Kidney Injury
- PSI 11 Postoperative Respiratory Failure
- PSI 12 Perioperative Pulmonary Embolism (PE) or Deep Vein Thrombosis (DVT)
- PSI 13 Postoperative Sepsis
- PSI 14 Postoperative Wound Dehiscence
- PSI 15 Unrecognized Abdominopelvic Accidental Puncture/Laceration

Reference: https://www.qualityindicators.ahrq.gov/News/PSI90_Factsheet_FAQ.pdf

Other PSIs

- PSI 02 Death Rate in Low-Mortality Diagnosis Related Groups (DRGs)
- PSI 04 Death Rate among Surgical Inpatients with Serious Treatable Conditions
- PSI 05 Retained Surgical Item or Unretrieved Device Fragment Count
- PSI 07 Central Venous Catheter - Related Blood Stream Infection Rate
- PSI 16 Transfusion Reaction Count
- PSI 17 Birth Trauma Rate – Injury to Neonate
- PSI 18 Obstetric Trauma Rate – Vaginal Delivery With Instrument

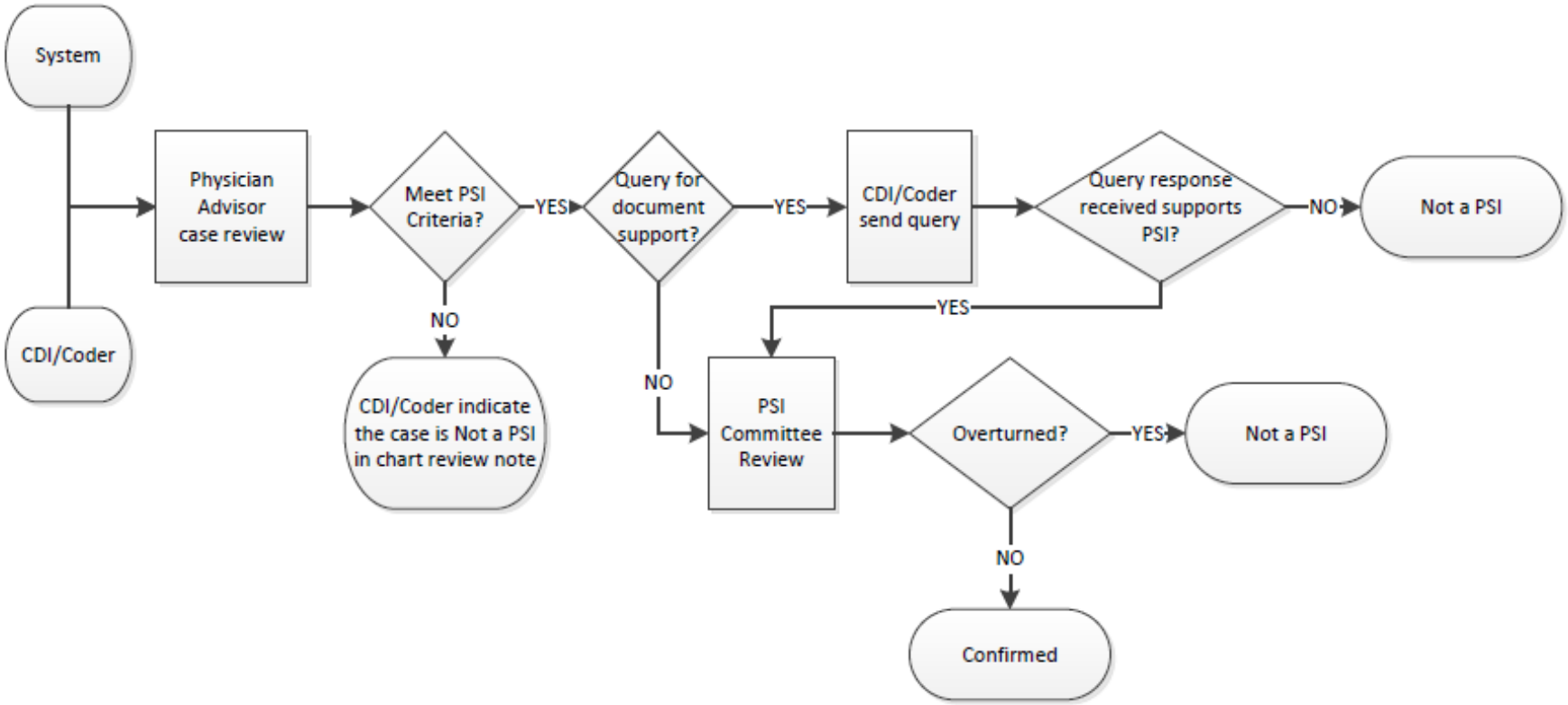
Reference: https://www.qualityindicators.ahrq.gov/

PSI Review Process

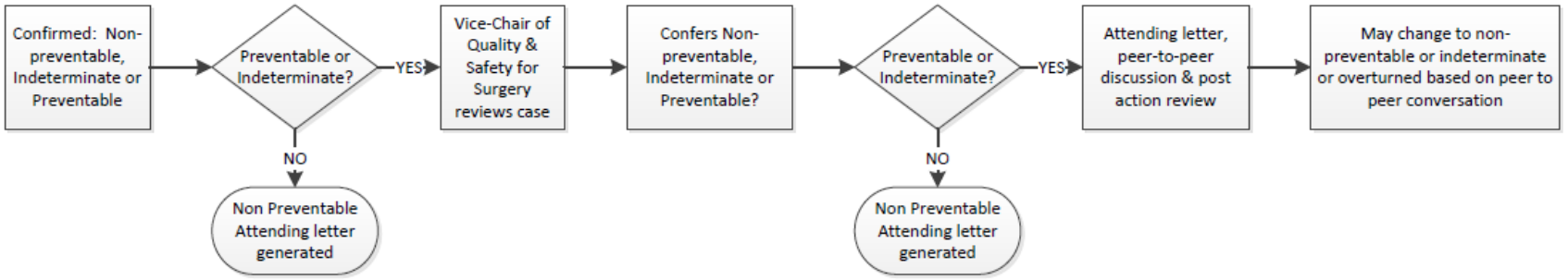
PSI Committee Members

- CDI, surgical service line
- CDI Educator
- CDI Manager
- Coding Manager
- Coding Supervisor
- Quality Improvement Advisor
- Physician Advisor (PA)
- Vice Chair of Quality for Surgery

PSI Chart Review Process



PSI Committee Review Process



Attending Notification Letter Non-Preventable

Dear Dr.

Your patient, has been identified as having met the AHRQ criteria for the following Patient Safety Indicator (PSI):

PSI-04 DEATH OF SURGICAL INPATIENTS WITH SERIOUS TREATABLE CONDITION

Stratum: SEPSIS

What are Patient Safety Indicators (PSIs)?

PSIs were developed by The Agency for Healthcare Research and Quality (AHRQ) to provide information on potential in-hospital complications and adverse events following surgeries, procedures, and childbirth. Hospital discharge admission data is put through software with specific inclusion and exclusion criteria to determine incidence of adverse events and complications. To review the detailed specifications for a PSI you can access the AHRQ website at:

http://www.qualityindicators.ahrq.gov/Modules/PSI_TechSpec_ICD10_v70.aspx

Why am I being notified?

The PSI Quality Committee thoroughly reviews each PSI and determines if it met inclusion criteria for AHRQ specifications. This PSI is considered non-preventable. The purpose of this notification is to provide physicians an opportunity to participate in quality improvement efforts and to discuss this PSI, if you desire, with members of the PSI Quality Committee; we are available at your convenience for discussion.

Even though this is a PSI, circumstances occur beyond our control as physicians. We value the work you are doing here at Penn State Health Hershey Medical Center and please continue the excellent care that you are providing.

Attending Notification Letter Preventable/Indeterminate

Dear Dr.

Your patient, has been identified as having met the AHRQ criteria for the following Patient Safety Indicator (PSI):

PSI-04 DEATH OF SURGICAL INPATIENTS WITH SERIOUS TREATABLE CONDITION

Stratum: SEPSIS

What are Patient Safety Indicators?

The Patient Safety Indicators (PSIs) were developed by The Agency for Healthcare Research and Quality (AHRQ) and are a set of indicators providing information on potential in hospital complications and adverse events following surgeries, procedures, and childbirth. The goal of PSI reporting is to recognize these unintended adverse events, learn from them, and take action to prevent future events when possible. To review the detailed specifications for a PSI you can access the AHRQ website at::

http://www.qualityindicators.ahrq.gov/Modules/PSI_TechSpec_ICD10_v70.aspx

What is the purpose of this notification?

The PSI Quality Committee thoroughly reviews each PSI and determines if it met inclusion criteria for AHRQ specifications. This PSI is considered preventable (indeterminate) and therefore, the Vice-Chair of Quality and Safety for Surgery or the Physician Advisor, members of the Committee, will reach out to you for further discussion. This meeting will afford you the opportunity to discuss the PSI event and allow you to participate in quality improvement efforts at Penn State Health Hershey Medical Center.

We greatly appreciate the work you are doing at Penn State Health Hershey Medical Center.

PSI Quality Committee Attending Notification Guidelines

- **Guideline Statements:**
  - The Clinical Documentation Improvement (CDI) Physician Advisor will send a confidential, secure email notification to the Attending Physician to whom the PSI is attributed after the committee has determined the following:
    - Specific PSI
    - Whether the PSI was deemed preventable, indeterminate, or non-preventable
  - The Vice-Chair of Quality & Safety for Surgery and or the Physician Advisor will contact every physician to whom a preventable or indeterminate PSI case is attributed for discussion.
  - This may encompass communication with physicians and Vice-Chairs of Quality & Safety who are outside of the Department of Surgery.
  - The Vice-Chair of Quality & Safety for Surgery may escalate any PSI case he/she deems necessary to the Chief Quality Officer (CQO).
  - The Physician Advisor will refer quality cases to the Vice-Chair of Quality & Safety for Surgery.

Case Scenario One

- CDI - concurrent review:
  - 45 y/o female underwent laparoscopic assisted vaginal hysterectomy for endometriosis
  - Procedure involved lysis of adhesions
  - Converted to open procedure to control bleeding for a puncture to left internal iliac artery
  - Acute blood loss anemia, Hgb 7.5 g/dl, transfused

PSI 15 Unrecognized Abdominopelvic Accidental Puncture or Laceration

- Accidental punctures or lacerations (secondary diagnosis) during a procedure of the abdomen or pelvis.
- Requires a second abdominopelvic procedure one or more days after the index procedure.
- Excludes cases with:
  - Accidental puncture or laceration as a principal diagnosis
  - Accidental puncture or laceration as a secondary diagnosis that is present on admission, and obstetric cases.

Case Scenario One

- Is this a PSI 15?
  - No
- Patient did not have a second abdominopelvic procedure
- Recommended for CDI to continue to follow patient
- Not a PSI
  - CDI indicated in chart review to alert coder

Case Scenario Two

- Coder/retrospective review, pre-bill:
  - 79 y/o male underwent left carotid endarterectomy, procedure was uncomplicated
- Postop course:
  - In recovery room enlarged left neck mass at incision site, Hgb 8.5 g/dl
  - Pt having difficulty swallowing and speaking
  - Taken back to OR from recovery room
    - No active bleeding, hematoma found below incision

Patient Safety Indicator 09 (PSI 09) Perioperative Hemorrhage or Hematoma Rate

- Perioperative hemorrhage or hematoma cases involving a procedure to treat the hemorrhage or hematoma, following surgery.
- Excludes cases with:
  - Diagnosis of coagulation disorder.
  - Principal diagnosis of perioperative hemorrhage or hematoma.
  - Secondary diagnosis of perioperative hemorrhage or hematoma present on admission.
  - Where the only operating room procedure is for treatment of perioperative hemorrhage or hematoma; obstetric cases.

Case Scenario Two: Outcome

- Postoperative hematoma coded
- Physician advisor presents case to PSI Committee
  - Confirmed, non-preventable due to surgery
    - Surgery carries an inherent risk for bleeding
  - Attending notification letter sent
  - Peer to peer discussion at discretion of provider, not mandatory, because non-preventable
- Quality improvement opportunity
  - Provider education regarding PSI 9

Case Scenario Three

- Generated from system, post-bill:
  - 57 y/o male with degenerative joint disease of left knee admitted for total knee arthroplasty
    - Procedure uncomplicated
  - PMH: Obesity BMI 33
  - Postop developed weakness and hypotension during physical therapy
    - Upgraded to ICU
    - Work up revealed left popliteal vein thrombosis
  - Prophylaxis
    - Sequential compression devices
    - Subcutaneous heparin started 24 hours post surgery

PSI 12 Perioperative Pulmonary Embolism or Deep Vein Thrombosis

- Perioperative pulmonary embolism or proximal deep vein thrombosis (secondary diagnosis).
- Excludes cases with:
  - Principle diagnosis for pulmonary embolism or proximal deep vein thrombosis.
  - Secondary diagnosis for pulmonary embolism or proximal deep vein thrombosis present on admission.
  - In which interruption of vena cava occurs before or on the same day as the first operating room procedure; and obstetric discharges.
  - Cases with acute brain or spinal injury ICD-10 codes, ECMO or procedure for pulmonary artery thrombectomy occurs before or on the same day as the first operating procedure.

Case Scenario Three: Outcome

- Physician advisor presents case to PSI Committee
- Confirmed, non-preventable due to surgery
  - Orthopedic surgery carries an increased risk for deep vein thrombosis (DVT)
- Attending notification letter sent
- Peer-to-peer discussion at discretion of provider, not mandatory, because non-preventable
- Quality improvement opportunity
  - Provider education regarding PSI 12
  - Discussion of DVT prophylaxis

Physician Advisor's Role in Quality Initiatives in PSIs

- Champion for CDI and Coders
- Reviews cases against AHRQ criteria
- Develops ongoing guidelines as needed for the committee
- Presentation to committee members
- Deem preventable, non-preventable, or indeterminate
- Query's for documentation
- Quality & safety review and escalation
- Peer-to-peer discussions
- After action reviews documented

Mortality Pre-Bill Review Process

Improving Risk-Adjusted Mortality

OBSERVED MORTALITY

Actual number of inpatient deaths that occur in the hospital during a specific time period.

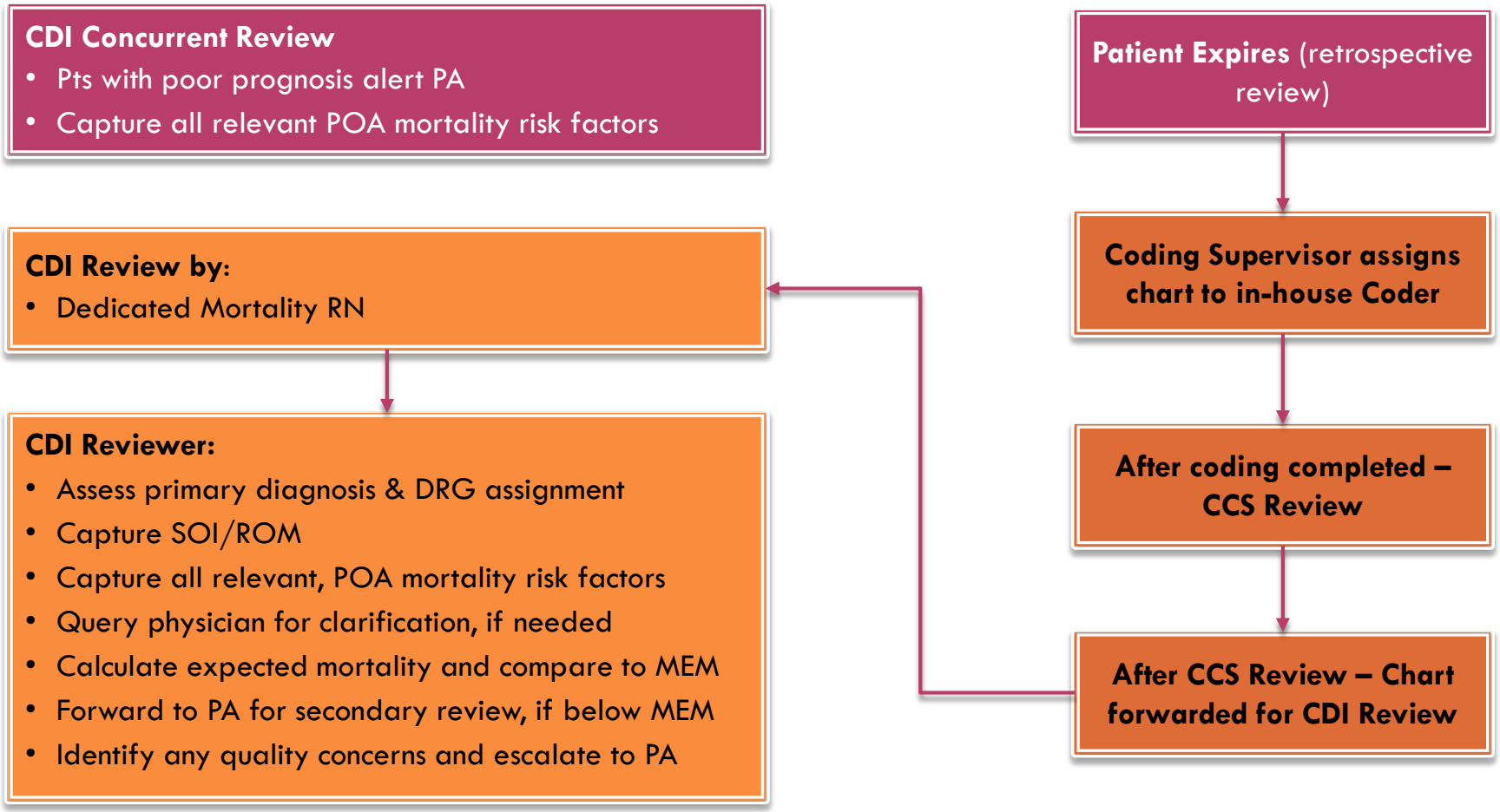
- ☑ **Opportunity for improved clinical quality**
- ☑ **Are we providing the right care, at the right time, in the right setting?**

EXPECTED MORTALITY

Predicted number of deaths in the hospital based on patients' level of illness PRESENT AT ADMISSION.

- ☑ **Opportunity for improved documentation**
- ☑ **Reflect the true severity of our patients**
- ☑ **Path to valid benchmarking**

Mortality Review – Workflow Process



CCS Coding Compliance Specialist
CDI Clinical Documentation Improvement
PA Physician Advisor
MEM Mean expected mortality

Case Scenario One

- 90 year old male presents to ED with a STEMI and is admitted to ICU with:
  - Acute respiratory failure
  - Cardiogenic shock
  - Acute kidney failure
  - Coagulopathy
  - Acidosis
- Hospital day one
  - Decision for comfort care, patient expired

Case Scenario One

- DRG 283 AMI:
  - Mean risk of mortality (MEM) 7.3%
  - SOI/ROM: 4/4
    - Acute respiratory failure
    - Cardiogenic shock
    - Acute kidney failure
    - Coagulation defect
    - Acidosis

Case Scenario One

- Mortality risk factors for DRG 283
  - Cardiogenic shock - POA
  - Coagulation defect - POA
  - Acidosis - POA
  - Acute kidney failure – POA
  - Male >85
- *Expected* risk of mortality for this patient is 57.0%, above MEM

Case Scenario Two

- 75 y/o female with CKD stage 3, presents to ED with sepsis secondary to pneumonia, admitted to ICU with:
  - Septic shock
  - Encephalopathy
  - Acute Kidney failure
  - Acidosis
  - Low platelets
  - INR 1.6
  - Elevated liver enzymes & bilirubin
- Hospital day one
  - Respiratory failure with mechanical ventilation
  - Expired

Case Scenario Two

- DRG 870 (Sepsis w MV >96 HRS)
  - Risk of Mortality 11.5% (MEM)
- SOI/ROM: 4/4
  - Respiratory failure
  - Pneumonia
  - Toxic encephalopathy
  - Severe sepsis with septic shock
  - Acute kidney failure

Case Scenario Two

- Mortality risk factors for DRG 870
  - Shock - POA
  - Severe sepsis - POA
  - Acidosis - POA
  - Acute kidney failure - POA
  - Chronic kidney disease stage - POA
  - Female, age 75
- *Expected* risk of mortality is 9.0 %, below MEM

Case Scenario Two

- Physician Advisor's secondary review:
  - DRG correct
  - SOI/ROM maximized
  - Additional DRG mortality risk factors:
    - Shock liver documented - POA
    - Vasopressors - POA
    - Query for coagulopathy - POA
- *Expected risk of mortality now 33.1 %, above MEM*

Physician Advisor's Role in Quality Initiatives in Mortality Reviews

- Champion for dedicated Coder for mortality review
- Champion for dedicated CDI for mortality review
- Calculation of expected mortality (below/above)
- Quality and safety reviews and escalation

Connecting with Providers: Unit Accountable Care Teams

Unit Accountable Care Team (UACT)

- Organizational initiative designed to improve quality and clinical performance across the continuum of care.
- Develop unit/practice site-specific initiatives designed to improve: quality, patient safety and patient experience.
- Develop close working relationships, creating a sense of shared accountability for unit performance.

Reference: (2016). What is a UACT? *Clinical Quality Newsletter,* 1(1). Retrieved from https://infonet.pennstatehershey.net/documents/1008982/12257072/Clinical+Quality+Newsletter+-+Fall+2016/c836bbf6-c485-433f-b10e-fede16d47f47?version=1.0

Unit Accountable Care Team Physician Advisor's Role

- CDI champion
- Peer-to-peer discussions
- Discuss patient safety and quality issues:
  - Pressure injuries
  - CLABSI
  - CAUTIs
- Share provider concerns with Chief Quality Officer

Summary

- PSHMC Physician Advisor Quality Initiatives:
  - PSI
    - Reviews workflow process
    - Attending notification
    - Peer-to-peer discussions
  - Risk adjusted mortality reviews
    - DRG specific risk factors captured
  - Interdisciplinary rounds (UACT)
  - Escalation of patient quality and safety concerns

Thank you.
Questions?