Quality Metric Analytics Throughout The Ohio State University Wexner Medical Center Neurological Institute

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Quality and Safety Disclosures 8/8/19

- **Disclosures**
  - I/we have no financial relationships to disclose.

- **Proprietary Information**
  - Has been redacted

- **Investigational/off label use**
  - I will not discuss off label use and/or investigational use in my presentation.
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• How did we get here?
• What are the Metrics?
• What do we study?
• What should we study?
OSU Medical Center

Featured Services

- Cancer
- Heart and Vascular
- Neurological Institute
- Obstetrics and Gynecology
- Sports Medicine

Transplant
OSU Medical Center – Hospital Units

Please note, all OSU and OSU Wexner Medical Center locations are tobacco-free and weapon-free zones.
### OSU Neurological Institute Participating Departments

<table>
<thead>
<tr>
<th>Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of Neurology</td>
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<tr>
<td>Department of Neuroscience</td>
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<td>Department of Neurosurgery</td>
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<td>Department of Physical Medicine and Rehabilitation</td>
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<td>Department of Psychiatry</td>
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Organizations for Patient Safety.....
### Quality Data & External Reporting

<table>
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<tr>
<th>Regulatory/Public Data</th>
<th>Payers</th>
<th>Registries/Benchmarking</th>
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<tr>
<td>CMS</td>
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<td>Leapfrog</td>
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<td>MMO</td>
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<td>NHSN/CDC</td>
<td>Cigna</td>
<td>UHC</td>
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<td>Oryx</td>
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<td>BOLD</td>
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<td>CARF</td>
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<td>eRehab</td>
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<td>Coverdell</td>
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<td>SVS</td>
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<td>INTERMACS</td>
</tr>
<tr>
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</tbody>
</table>

Red = Public Data
Patient Safety

Department of Health and Human Services
Guard Dog

If you are not at the table, you’re on the menu
Agency for Healthcare Research and Quality (AHRQ)

- Created by the Healthcare Research and Quality Act of 1999
- Lead federal agency for health care safety, research
- Mission is to produce evidence to make health care safer, higher quality, more accessible, equitable, and affordable, and to work within the U.S. Department of Health and Human Services and with other partners to make sure that the evidence is understood and used

  - AHRQuality Indicators™
  - National Guideline Clearinghouse
  - PSO clearinghouse
  - Patient Safety Network (PSNet)
  - https://subscriptions.ahrq.gov/accounts/USAHRQ/subscriber/new
Agency for Healthcare Research and Quality (AHRQ)

- Center for Delivery, Organization, and Markets (CDOM)
- Center for Evidence and Practice Improvement (CEPI)
- Center for Financing, Access and Cost Trends (CFACT)
- Center for Quality Improvement and Patient Safety (CQuIPS)
- Office of the Director (OD)
- Office of Communications (OC)
- Office of Extramural Research, Education and Priority Populations (OEREP)
- Office of Management Services (OMS)
AHRQ Quality Indicators

- Prevention Quality Indicator (PQI)
- In-patient Quality Indicator (IQI)
- Patient Safety Indicators (PSI)
- Pediatric Quality Indicators

- Hospital performance results based on these quality indicators are reported on an HHS site called Hospital Compare and are published in an annual AHRQ survey.

- [https://www.medicare.gov/hospitalcompare/search.html](https://www.medicare.gov/hospitalcompare/search.html)
PSI selection

- Literature review
- Panel review of candidate PSIs
- Review of ICD-9-CM codes in candidate PSIs
- 200 potential ICD-9-CM codes PS problems
- Evaluation for validity on sensitivity and specificity of PSI’s to detect complications and process failures
## Table 11. Accepted Indicators (provider and area level)

<table>
<thead>
<tr>
<th>Indicator Name</th>
<th>Multi-specialty Panel Evaluation</th>
<th>Surgical Panel Evaluation</th>
<th>Definition Used</th>
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</thead>
<tbody>
<tr>
<td>Complications of anesthesia</td>
<td></td>
<td>3 Acceptable (-)</td>
<td>Surgical</td>
</tr>
<tr>
<td>Death in low mortality DRGs</td>
<td>M2 Acceptable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decubitus ulcer</td>
<td>M1 Acceptable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Failure to rescue</td>
<td>M2 Acceptable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign body left in during procedureb</td>
<td>S2 Acceptable</td>
<td>2 Acceptable (-)</td>
<td>Same</td>
</tr>
<tr>
<td>Iatrogenic pneumothoraxb</td>
<td>P1 Acceptable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Infection due to medical careb</td>
<td>M1 Acceptable (-)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Postoperative hemorrhage or hematoma d</td>
<td>S1 Acceptable (-)</td>
<td>3 Acceptable</td>
<td>Surgical</td>
</tr>
<tr>
<td>Postoperative hip fracturec</td>
<td>M1 Acceptable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Postoperative physiologic and metabolic derangements</td>
<td>S3 Acceptable (-)</td>
<td>3 Unclear</td>
<td>Surgical</td>
</tr>
<tr>
<td>Postoperative respiratory failure</td>
<td>S2 Unclear</td>
<td>2 Acceptable (-)</td>
<td>Surgical</td>
</tr>
<tr>
<td>Postoperative pulmonary embolism or deep venous thrombosis</td>
<td>S1 Acceptable (-)</td>
<td>1 Acceptable</td>
<td>Same</td>
</tr>
<tr>
<td>Postoperative sepsis</td>
<td>M1 Acceptable (-)</td>
<td>2 Acceptable (-)</td>
<td>Surgical</td>
</tr>
<tr>
<td>Postoperative wound dehiscenceb</td>
<td>S2 Acceptable (-)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technical difficulty with procedureb</td>
<td>P1 Acceptable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transfusion reactionb</td>
<td>S3 Acceptable</td>
<td>3 Acceptable</td>
<td>Same</td>
</tr>
<tr>
<td>Birth trauma-injury to neonate</td>
<td>O1 Acceptable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Obstetric trauma - cesarean sectionb</td>
<td>O1 Acceptable (-)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Obstetric trauma - vaginal with instrumentb</td>
<td>O1 Acceptable (-)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Obstetric trauma - vaginal without instrumentb</td>
<td>O1 Acceptable (-)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Table 12. Experimental Indicators

<table>
<thead>
<tr>
<th>Indicator Name</th>
<th>Multi-specialty Panel Evaluation&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Surgical Panel Evaluation&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Definition Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aspiration pneumonia</td>
<td>S2 Unclear</td>
<td>2</td>
<td>Surgical</td>
</tr>
<tr>
<td>CABG after PTCA&lt;sup&gt;b&lt;/sup&gt;</td>
<td>P1 Acceptable</td>
<td></td>
<td>Same</td>
</tr>
<tr>
<td>Decubitus ulcer in high risk patients&lt;sup&gt;c&lt;/sup&gt;</td>
<td></td>
<td></td>
<td>Same</td>
</tr>
<tr>
<td>In-hospital fractures possibly related to falls&lt;sup&gt;d&lt;/sup&gt;</td>
<td>M1 Acceptable</td>
<td></td>
<td>Surgical</td>
</tr>
<tr>
<td>Intraoperative nerve compression injuries&lt;sup&gt;e&lt;/sup&gt;</td>
<td>S3 Acceptable</td>
<td>3</td>
<td>Acceptable</td>
</tr>
<tr>
<td>Malignant hyperthermia&lt;sup&gt;f&lt;/sup&gt;</td>
<td>S3 Acceptable</td>
<td>1</td>
<td>Acceptable (-)</td>
</tr>
<tr>
<td>Postoperative acute myocardial infarction&lt;sup&gt;g&lt;/sup&gt;</td>
<td>S1 Unclear (-)</td>
<td>3</td>
<td>Acceptable (-)</td>
</tr>
<tr>
<td>Postoperative iatrogenic complications – cardiac system&lt;sup&gt;h&lt;/sup&gt;</td>
<td>P1 Not rated separately</td>
<td></td>
<td>Surgical</td>
</tr>
<tr>
<td>Postoperative iatrogenic complications – nervous system&lt;sup&gt;i&lt;/sup&gt;</td>
<td>P1 Not rated separately</td>
<td></td>
<td>Surgical</td>
</tr>
<tr>
<td>Reopening of surgical site&lt;sup&gt;j&lt;/sup&gt;</td>
<td>S2 Unclear (-)</td>
<td>3</td>
<td>Acceptable (-)</td>
</tr>
<tr>
<td>Suture of laceration&lt;sup&gt;k&lt;/sup&gt;</td>
<td>S2 Acceptable</td>
<td>2</td>
<td>Unclear (-)</td>
</tr>
<tr>
<td>Obstetric wound complications - cesarean section</td>
<td>O2 Acceptable</td>
<td></td>
<td>Surgical</td>
</tr>
<tr>
<td>Obstetric wound complications - vaginal delivery</td>
<td>O2 Unclear</td>
<td></td>
<td>Surgical</td>
</tr>
<tr>
<td>Other obstetric complications</td>
<td>O2 Unclear</td>
<td></td>
<td>Surgical</td>
</tr>
<tr>
<td>Post-partum urinary tract infection</td>
<td>O2 Acceptable</td>
<td></td>
<td>Surgical</td>
</tr>
<tr>
<td>Third or fourth degree obstetric laceration (JCAHO)&lt;sup&gt;l&lt;/sup&gt;</td>
<td></td>
<td></td>
<td>Surgical</td>
</tr>
<tr>
<td>Uterine rupture&lt;sup&gt;m&lt;/sup&gt;</td>
<td></td>
<td></td>
<td>Surgical</td>
</tr>
</tbody>
</table>
Table 13. Rejected Indicators

<table>
<thead>
<tr>
<th>Indicator Name</th>
<th>Multi-specialty Panel Evaluation</th>
<th>Surgical Panel Evaluation</th>
<th>Definition Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dosage complications</td>
<td>M2</td>
<td>Unclear (-)</td>
<td></td>
</tr>
<tr>
<td>Iatrogenic hypotension</td>
<td>P1</td>
<td>Unclear (-)</td>
<td></td>
</tr>
<tr>
<td>Intestinal infection due to C. difficile</td>
<td>M1</td>
<td>Unclear (-)</td>
<td></td>
</tr>
<tr>
<td>PO iatrogenic complications – digestive complications</td>
<td>P1</td>
<td>Not rated separately</td>
<td></td>
</tr>
<tr>
<td>PO iatrogenic complications – respiratory complications</td>
<td>P1</td>
<td>Not rated separately</td>
<td></td>
</tr>
<tr>
<td>PO iatrogenic complications – urinary complications</td>
<td>P1</td>
<td>Not rated separately</td>
<td></td>
</tr>
<tr>
<td>PO iatrogenic complications – vascular complications</td>
<td>P1</td>
<td>Not rated separately</td>
<td></td>
</tr>
<tr>
<td>Postoperative pneumonia</td>
<td>S1</td>
<td>Unclear (-)</td>
<td>Either</td>
</tr>
<tr>
<td>Unexpected LOS/Conditional LOS</td>
<td>M2</td>
<td>Unclear</td>
<td>Unable to specify panel suggestions</td>
</tr>
<tr>
<td>Obstetric thrombosis or embolism</td>
<td>O2</td>
<td>Unclear (-)</td>
<td></td>
</tr>
<tr>
<td>Puerperal infection</td>
<td>O2</td>
<td>Unclear (-)</td>
<td></td>
</tr>
</tbody>
</table>
Quality Indicators

**Prevention Quality Indicators**

- PQI 01 - Diabetes, short-term complications admission rate
- PQI 02 - Perforated appendix admission rate
- PQI 03 - Diabetes, long-term complications admission rate
- PQI 05 - Chronic obstructive pulmonary disease (COPD) or asthma in older adults admission rate
- PQI 07 - Hypertension admission rate
- PQI 08 - Heart failure admission rate
- PQI 09 - Low birth weight admission rate
- PQI 10 - Dehydration admission rate
- PQI 11 - Bacterial pneumonia admission rate
- PQI 12 - Urinary tract infections admission rate
- PQI 13 - Angina without procedure admission rate
- PQI 14 - Uncontrolled diabetes admission rate
- PQI 15 - Asthma in younger adults admission rate
- PQI 16 - Lower extremity amputations among patients with diabetes admission rate
- PQI 90 - Prevention Quality Overall Composite
- PQI 91 - Prevention Quality Acute Composite
- PQI 92 - Prevention Quality Chronic Composite
# Inpatient Quality Indicators

- IQI 01 - Esophageal resection volume
- IQI 02 - Pancreatic resection volume
- IQI 04 - Abdominal aortic aneurysm (AAA) repair volume
- IQI 05 - Coronary artery bypass graft (CABG) volume
- IQI 06 - Percutaneous coronary intervention (PCI) volume
- IQI 07 - Carotid endarterectomy volume
- IQI 08 - Esophageal resection mortality rate
- IQI 09 - Pancreatic resection mortality rate
- IQI 11 - Abdominal aortic aneurysm repair (AAA) mortality rate
- IQI 12 - Coronary artery bypass graft (CABG) mortality rate
- IQI 13 - Craniotomy mortality rate
- IQI 14 - Hip replacement mortality rate
- IQI 15 - Acute myocardial infarction (AMI) mortality rate
- IQI 16 - Heart failure mortality rate
- IQI 17 - Acute stroke mortality rate
- IQI 18 - Gastrointestinal hemorrhage mortality
- IQI 19 - Hip fracture mortality rate
- IQI 20 - Pneumonia mortality rate
- IQI 21 - Cesarean delivery rate, uncomplicated
- IQI 22 - Vaginal birth after cesarean (VBAC) delivery rate, uncomplicated
- IQI 23 - Laparoscopic cholecystectomy rate
- IQI 24 - Incidental appendectomy in the elderly rate
- IQI 25 - Bilateral cardiac catheterization rate
- IQI 26 - Coronary artery bypass graft (CABG) rate
- IQI 27 - Percutaneous coronary intervention (PCI) rate
- IQI 28 - Hysterectomy rate
- IQI 29 - Laminectomy or spinal fusion rate
- IQI 30 - Percutaneous coronary intervention (PCI) mortality rate
- IQI 31 - Carotid endarterectomy mortality rate
- IQI 32 - Acute myocardial infarction (AMI) mortality rate, without transfer cases
- IQI 33 - Primary cesarean delivery rate, uncomplicated
- IQI 34 - Vaginal birth after cesarean (VBAC) rate, all
- IQI 90 - Mortality for Selected Procedures
- IQI 91 - Mortality for Selected Conditions
Quality Indicators

**Patient Safety Indicators**

**Provider-Level Indicators**
- PSI 02 - Death rate in low-mortality diagnosis related groups (DRGs)
- PSI 03 - Pressure ulcer rate
- PSI 04 - Death rate among surgical inpatients with serious treatable conditions
- PSI 05 - Retained surgical item or unretrieved device fragment count
- PSI 06 - Iatrogenic pneumothorax rate
- PSI 07 - Central venous catheter-related blood stream infection rate
- PSI 08 - Postoperative hip fracture rate
- PSI 09 - Perioperative hemorrhage or hematoma rate
- PSI 10 - Postoperative physiologic and metabolic derangement rate
- PSI 11 - Postoperative respiratory failure rate
- PSI 12 - Perioperative pulmonary embolism or deep vein thrombosis rate
- PSI 13 - Postoperative sepsis rate
- PSI 14 - Postoperative wound dehiscence rate
- PSI 15 - Accidental puncture or laceration rate
- PSI 16 - Transfusion reaction count
- PSI 17 - Birth trauma rate – injury to neonate
- PSI 18 - Obstetric trauma rate – vaginal delivery with instrument
- PSI 19 - Obstetric trauma rate-vaginal delivery without instrument
- PSI 90 - Patient Safety for Selected Indicators

**Area-Level Indicators**
- PSI 21 - Retained surgical item or unretrieved device fragment rate
- PSI 22 - Iatrogenic pneumothorax rate
- PSI 23 - Central venous catheter-related blood stream infection rate
- PSI 24 - Postoperative wound dehiscence rate
- PSI 25 - Accidental puncture or laceration rate
- PSI 26 - Transfusion reaction rate
- PSI 27 - Postoperative hemorrhage or hematoma rate
# Quality Indicators

## Pediatric Quality Indicators

### Hospital-Level Indicators
- NQI 01 - Iatrogenic pneumothorax in neonates
- NQI 02 - Neonatal mortality
- NQI 03 - Bloodstream infections in neonates
- PDI 01 - Accidental puncture or laceration
- PDI 02 - Pressure ulcer
- PDI 03 - Retained surgical item or unretrieved device fragment
- PDI 05 - Iatrogenic pneumothorax
- PDI 06 - Pediatric heart surgery mortality
- PDI 07 - Pediatric heart surgery volume
- PDI 08 - Postoperative hemorrhage or hematoma
- PDI 09 - Postoperative respiratory failure
- PDI 10 - Postoperative sepsis
- PDI 11 - Postoperative wound dehiscence
- PDI 12 - Central venous catheter-related bloodstream infections
- PDI 13 - Transfusion reactions
- PDI 19 - Pediatric Safety for Selected Indicators

### Area-Level Indicators (e.g., county, State)
- PDI 14 - Asthma admissions
- PDI 15 - Diabetes short-term complications
- PDI 16 - Gastroenteritis admissions
- PDI 17 - Perforated appendix admissions
- PDI 18 - Urinary tract infection admissions
- PDI 90 - Pediatric Quality Overall Composite
- PDI 91 - Pediatric Quality Acute Composite
- PDI 92 - Pediatric Quality Chronic Composite
## Patient Safety / Quality Medical Center Metrics

<table>
<thead>
<tr>
<th>Performance Indicator</th>
<th>Metric</th>
<th>Description</th>
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<tbody>
<tr>
<td>Fall Prevention</td>
<td>Incidence Rate</td>
<td>Number of falls per 1000 patient-days</td>
</tr>
<tr>
<td>Pressure Ulcers</td>
<td>Incidence Rate</td>
<td>Number of pressure ulcers per 1000 patient-days</td>
</tr>
<tr>
<td>Catheter-associated Urinary Tract Infections</td>
<td>Incidence Rate</td>
<td>Number of catheter-associated urinary tract infections per 1000 patient-days</td>
</tr>
<tr>
<td>MRSA Bloodstream Infections</td>
<td>Incidence Rate</td>
<td>Number of MRSA bloodstream infections per 1000 patient-days</td>
</tr>
<tr>
<td>Sepsis Due to Methicillin-resistant Staphylococcus Aureus</td>
<td>Incidence Rate</td>
<td>Number of sepsis due to MRSA per 1000 patient-days</td>
</tr>
<tr>
<td>The British Thoracic Society</td>
<td>Incidence Rate</td>
<td>Number of British Thoracic Society cases per 1000 patient-days</td>
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</table>

### Patient Falls

<table>
<thead>
<tr>
<th>Metric</th>
<th>Description</th>
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<tbody>
<tr>
<td>Total Falls per 1000 patient-days</td>
<td>Health System</td>
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<tr>
<td>Falls per 1000 patient-days</td>
<td>Injury Falls per 1000 patient-days</td>
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### Patient Experience

<table>
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<tbody>
<tr>
<td>MCARS</td>
<td>COM-PS Overall Rating</td>
</tr>
<tr>
<td>CECARS</td>
<td>CSM-PS Nurse Communication</td>
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</table>

### Efficiency

<table>
<thead>
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</tr>
</thead>
<tbody>
<tr>
<td>OR Utilization</td>
<td>Overall Utilization Rate</td>
</tr>
<tr>
<td>OR Utilization</td>
<td>OR Utilization Rate by Specialty</td>
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</tbody>
</table>

### Length of Stay Index

<table>
<thead>
<tr>
<th>Metric</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Days</td>
<td>Days of Stay per 1000 patient-days</td>
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</tbody>
</table>

### Consumer-based Payment Programs

<table>
<thead>
<tr>
<th>Metric</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Performance Score</td>
<td>Total Performance Score</td>
</tr>
</tbody>
</table>

### Hospital Acquired Conditions

- **Healthcare Associated Infection:**
  - Sepsis due to MRSA
  - Sepsis due to Methicillin-resistant Staphylococcus Aureus

### Timelessness of Care

<table>
<thead>
<tr>
<th>Metric</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length of Stay</td>
<td>Length of Stay per 1000 patient-days</td>
</tr>
</tbody>
</table>

### Behavioral Health

- **Emergency Department:**
  - Length of Stay
  - Wait Time to Discharge

- **Inpatient:**
  - Length of Stay
  - Wait Time to Discharge

- **Sepsis:**
  - Sepsis Due to Methicillin-resistant Staphylococcus Aureus

- **Drug Discharge:**
  - Drug Discharge with Multiple Antibiotic Treatments

- **Surgical Site Infections:**
  - Surgical Site Infections per 1000 patient-days

- **Venous Thromboembolism:**
  - Venous Thromboembolism Prophylaxis per 1000 patient-days

- **Inpatient Falls:**
  - Inpatient Falls per 1000 patient-days

- **Hospital-acquired Infections:**
  - Hospital-acquired Infections per 1000 patient-days

### Venous Thromboembolism Care

- **Prevention:**
  - Venous Thromboembolism Prophylaxis per 1000 patient-days

- **Screening:**
  - Venous Thromboembolism Prophylaxis per 1000 patient-days

- **Management:**
  - Management of Venous Thromboembolism

- **Rehabilitation:**
  - Venous Thromboembolism Prophylaxis per 1000 patient-days

### Venous Thromboembolism Prevention

- **Prevention:**
  - Venous Thromboembolism Prophylaxis per 1000 patient-days

- **Screening:**
  - Venous Thromboembolism Prophylaxis per 1000 patient-days

- **Management:**
  - Management of Venous Thromboembolism

- **Rehabilitation:**
  - Venous Thromboembolism Prophylaxis per 1000 patient-days

### Venous Thromboembolism Prophylaxis

- **Prevention:**
  - Venous Thromboembolism Prophylaxis per 1000 patient-days

- **Screening:**
  - Venous Thromboembolism Prophylaxis per 1000 patient-days

- **Management:**
  - Management of Venous Thromboembolism

- **Rehabilitation:**
  - Venous Thromboembolism Prophylaxis per 1000 patient-days
National Quality Measures Clearinghouse
The purpose of the National Patient Safety Goals is to improve patient safety. The goals focus on problems in health care safety and how to solve them.

Identify patients correctly

NPSG.01.01.01 Use at least two ways to identify patients. For example, use the patient’s name and date of birth. This is done to make sure that each patient gets the correct medicine and treatment.

NPSG.01.03.01 Make sure that the correct patient gets the correct blood when they get a blood transfusion.

Improve staff communication

NPSG.02.03.01 Get important test results to the right staff person on time.

Use medicines safely

NPSG.03.04.01 Before a procedure, label medicines that are not labeled. For example, medicines in syringes, cups and basins. Do this in the area where medicines and supplies are set up.

NPSG.03.05.01 Take extra care with patients who take medicines to thin their blood.

NPSG.03.06.01 Record and pass along correct information about a patient’s medicines. Find out what medicines the patient is taking. Compare those medicines to new medicines given to the patient. Make sure the patient knows which medicines to take when they are at home. Tell the patient it is important to bring their up-to-date list of medicines every time they visit a doctor.

Use alarms safely

NPSG.06.01.01 Make improvements to ensure that alarms on medical equipment are heard and responded to on time.

Prevent infection

NPSG.07.01.01 Use the hand cleaning guidelines from the Centers for Disease Control and Prevention or the World Health Organization. Set goals for improving hand cleaning. Use the goals to improve hand cleaning.

NPSG.07.03.01 Use proven guidelines to prevent infections that are difficult to treat.

NPSG.07.04.01 Use proven guidelines to prevent infection of the blood from central lines.

NPSG.07.05.01 Use proven guidelines to prevent infection after surgery.

NPSG.07.06.01 Use proven guidelines to prevent infections of the urinary tract that are caused by catheters.

Identify patient safety risks

NPSG.15.01.01 Find out which patients are at risk for suicide.

Prevent mistakes in surgery

UP.01.01.01 Make sure that the correct surgery is done on the correct patient and at the correct place on the patient’s body.

UP.01.02.01 Mark the correct place on the patient’s body where the surgery is to be done.

UP.01.03.01 Pause before the surgery to make sure that a mistake is not being made.

https://www.jointcommission.org/assets/1/6/2019_HAP_NPSGs_final2.pdf
The Joint Commission: Facts about the National Patient Safety Goals  
November 30, 2018

Development of the Goals
- Input from practitioners, provider organizations, purchasers, consumer groups and other stakeholders,
- The Joint Commission determines the highest priority patient safety issues and how best to address them, including as a NPSG.

Changes effective for 2019
- **NPSG.15.01.01 on suicide prevention**
  - Behavioral health care organizations, psychiatric hospitals, and psychiatric units in general hospitals should conduct environmental risk assessments to be ligature resistant.
  - Non-psychiatric units in general hospitals are not expected to be ligature resistant; however, the units should minimize risks in the environment for patients identified at risk for suicide.
  - Individuals being treated or evaluated for behavioral health conditions as their primary reason for care need to be screened for suicide risk using a validated tool.
  - Organizations must develop a plan to mitigate suicide based on an individual's overall level of risk.
  - Organizations must follow written policies and procedures for counseling and follow-up care for individuals identified as at risk for suicide.

- **NPSG.03.05.01 on anticoagulant therapy**
  - using approved protocols and evidenced-based guidelines,
  - ongoing patient monitoring,
  - patient and family education,
  - evaluating organizational safety practices
  - taking actions to improve those practices
Clear So Far?
OSUWMC Quality Oversight

Leadership Council for Clinical Quality, Safety, & Service

Medical Staff Administrative Committees

Medical Center Board

Chief Nurse Executive

Administrator:
Nursing Quality, Evidence-Based Practice, Nursing Research, Nursing Education and Patient Education

Director: Nursing Quality & Evidence-Based Practice
Manager: Health System Nursing Quality
Senior Data Manager
Associate Director: Evidence-Based Practice & Standards
Clinical Nurse Specialists
Nurse Educators

Director: Nursing Education

Associate Chief Nursing Officer
Nursing Director
Nurse Manager
Assistant Nurse Manager
Nursing Staff

Quality Professional Affairs Committee

Clinical Care & Payment Transformation Committee

Clinical Resource Utilization Committee

Clinical Quality & Patient Safety Committee

Evidence Based Medicine Committee

Patient Experience Committee

OSUWMC Quality & Patient Safety Committees
NDNQI Nursing-Sensitive Indicators

Nursing-sensitive indicators reflect the structure, process, and patient outcomes of nursing care.

- **Structure** - supply of nursing staff, skill level of staff, and education of staff
- **Process** - assessment, intervention, and job satisfaction
- **Outcomes** - patient outcomes that improve if there is greater quantity and quality of nursing care

How are Nursing-Sensitive Indicators Developed?

- A potential indicator is identified that reflects nursing care and is not represented by a current indicator
- A literature review is performed
- If the indicator is supported by empirical evidence, it is sent to a panel of nursing experts
- These experts determine the validity of the potential indicator in nursing practice
- Once validity is determined, the panel asks participating facilities if data collection will place undue burden on the delivery of quality patient care
- Once the potential indicator has been empirically supported to be meaningful in clinical practice and it has been determined that no undue burden would be placed on participating facilities, a pilot study is performed in willing facilities
- Data collection methods are revised based on pilot study
- Those indicators that are of most value for the effort are added to the NDNQI list and measured

List of Indicators

- **Nursing Hours per Patient Day**
  - Registered Nurses (RN) Hours per Patient Day
  - Licensed Practical/Vocational Nurses (LPN/LVN) Hours per Patient Day
  - Unlicensed Assistive (UAP) Hours per Patient Day
- **Nursing Turnover Rate**
- **Nosocomial Infections**
- **Patient Falls**
- **Patient Falls with Injury**
- **Pressure Ulcer Rate**
- **Pediatric Pain Assessment, Intervention, Reassessment (AIR) Cycle**
- **Pediatric Peripheral Intravenous Infiltration**
- **Psychiatric Physical/Sexual Assault**
- **RN Education/Certification**
- **RN Survey**
- **Restraints**
- **Staff Mix**

(ANA, 2010; Gallagher & Rowell, 2003; Montalvo, 2007; NDNQI, 2010a)
**Nurse Sensitive Indicators**

Assaults by Psychiatric Patients**
Assaults on Nursing Personnel**
Bar code scanning compliance***
Births data**
Central line-associated bloodstream infection (CLA-BSI) incidence***
Central line-associated bloodstream infection (CLA-BSI) rate*
Education and Certification*
Falls incidence/rate*
Falls with injury incidence/rate**
Hand hygiene***
Hospital-acquired pressure ulcer incidence***
Hospital-acquired pressure ulcer prevalence rate*
Lactation Consultant Hours**
Nosocomial catheter associated urinary tract infection (CAUTI) incidence*
Nosocomial catheter associated urinary tract infection (CAUTI) rate*

Nosocomial multidrug-resistant organisms infection incidence*

Nursing Care Hours**
Nursing Care Minutes**
Operating margin***

Restraint prevalence*
RN direct hours per patient day**
RN Survey****
Ventilator associated event (VAE) incidences***
Ventilator associated event (VAE) rate**
## FY 2018 Targets – Vizient Based Data

<table>
<thead>
<tr>
<th>Performance Incentive Metrics</th>
<th>Current Performance</th>
<th>Peer Rank (Est)</th>
<th>FY 18 Target</th>
<th>Target Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mortality Index – Medical Center</td>
<td>0.77</td>
<td>6</td>
<td>0.76</td>
<td>Top Decile</td>
</tr>
<tr>
<td>Mortality Index – System (No James)</td>
<td>0.75</td>
<td>3</td>
<td>0.73</td>
<td>Best Perf</td>
</tr>
<tr>
<td>LOS Index</td>
<td>1.02</td>
<td>9</td>
<td>0.97</td>
<td>Top Quartile</td>
</tr>
<tr>
<td>PSI 90</td>
<td>0.66</td>
<td>12</td>
<td>0.62</td>
<td>Top Quartile</td>
</tr>
<tr>
<td>PSI-10 – Acute Kidney Injury</td>
<td>2.97</td>
<td>22</td>
<td>1.65</td>
<td>Median</td>
</tr>
<tr>
<td>PSI-11 – Post Op Resp Failure</td>
<td>5.16</td>
<td>15</td>
<td>4.65</td>
<td>Median</td>
</tr>
<tr>
<td>PSI-12 – Post Op PE/DVT</td>
<td>5.17</td>
<td>12</td>
<td>4.18</td>
<td>Top Quartile</td>
</tr>
<tr>
<td>PSI 13 – Post OP Sepsis</td>
<td>6.27</td>
<td>14</td>
<td>5.48</td>
<td>Median</td>
</tr>
<tr>
<td>Overall 30 Day All Cause Readmission Rate</td>
<td>12.62%</td>
<td>22</td>
<td>11.39%</td>
<td>Median</td>
</tr>
<tr>
<td>Overall 30 Day All Cause Readmission Rate (without James)</td>
<td>10.68%</td>
<td>7</td>
<td>8.91%</td>
<td>Top Decile</td>
</tr>
<tr>
<td>Overall 30 Day All Cause Readmission Rate – AMI</td>
<td>14.26%</td>
<td>16</td>
<td>12.32%</td>
<td>Median</td>
</tr>
<tr>
<td>Overall 30 Day All Cause Readmission Rate – HF</td>
<td>19.89%</td>
<td>9</td>
<td>18.24%</td>
<td>Median</td>
</tr>
<tr>
<td>Overall 30 Day All Cause Readmission Rate – PN</td>
<td>17.06%</td>
<td>4</td>
<td>10.14%</td>
<td>Top 2</td>
</tr>
<tr>
<td>Overall 30 Day All Cause Readmission Rate – COPD</td>
<td>17.12%</td>
<td>14</td>
<td>17.08%</td>
<td>Median</td>
</tr>
<tr>
<td>Overall 30 Day All Cause Readmission Rate – THA/TKA</td>
<td>4.27%</td>
<td>15</td>
<td>4.0%</td>
<td>Median</td>
</tr>
<tr>
<td>Overall 30 Day All Cause Readmission Rate – CABG</td>
<td>14.50%</td>
<td>16</td>
<td>13.9%</td>
<td>Median</td>
</tr>
</tbody>
</table>
# FY 2018 Targets – Hospital Compare Data

<table>
<thead>
<tr>
<th>Performance Incentive Metrics</th>
<th>Current Performance</th>
<th>Peer Rank</th>
<th>FY 18 Target</th>
<th>Target Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLABSI – SIR</td>
<td>0.561</td>
<td>n/a</td>
<td>0.786</td>
<td>Maintain</td>
</tr>
<tr>
<td>CAUTI – SIR</td>
<td>0.303</td>
<td>n/a</td>
<td>0.380</td>
<td>Maintain</td>
</tr>
<tr>
<td>CDI – SIR</td>
<td>0.777</td>
<td>n/a</td>
<td>0.771</td>
<td>Maintain</td>
</tr>
<tr>
<td>MRSA – SIR</td>
<td>0.662</td>
<td>n/a</td>
<td>0.579</td>
<td>Maintain</td>
</tr>
<tr>
<td>SSI – Colon SIR</td>
<td>0.431</td>
<td>n/a</td>
<td>1.000</td>
<td>Expected rate</td>
</tr>
<tr>
<td>SSI – Ab Hysterectomy SIR</td>
<td>0.894</td>
<td>n/a</td>
<td>1.000</td>
<td>Expected Rate</td>
</tr>
<tr>
<td>ED-1b: Door to Departure for Admitted ED Patients</td>
<td>431</td>
<td>14</td>
<td>376</td>
<td>Top Quartile</td>
</tr>
<tr>
<td>ED-2b: Admit Decision to ED Departure</td>
<td>185</td>
<td>16</td>
<td>182</td>
<td>Median</td>
</tr>
<tr>
<td>OP-18b: Door to Departure for Discharged ED Patients</td>
<td>220</td>
<td>12</td>
<td>192</td>
<td>Top Quartile</td>
</tr>
<tr>
<td>OP-20: ED Door to Evaluation</td>
<td>27</td>
<td>15</td>
<td>22</td>
<td>Top Quartile</td>
</tr>
<tr>
<td>OP-21: Time to Pain Management LBF</td>
<td>71</td>
<td>21</td>
<td>61</td>
<td>Median</td>
</tr>
<tr>
<td>OP-22: ED Left Without Being Seen</td>
<td>4.68%</td>
<td>22</td>
<td>3%</td>
<td>Median</td>
</tr>
</tbody>
</table>
## FY 19 Goals

<table>
<thead>
<tr>
<th>Metric</th>
<th>FY 2019 Goal</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mortality Index - Medical Center</td>
<td>0.79</td>
<td>Maintain FY 18 Target</td>
</tr>
<tr>
<td>Mortality Index - System (No James)</td>
<td>0.75</td>
<td>Maintain FY 18 Target</td>
</tr>
<tr>
<td>LOS Index</td>
<td>1.00</td>
<td>Achieve Expected LOS; Gain points on Aetna</td>
</tr>
<tr>
<td>PSI-90</td>
<td>0.63</td>
<td>13% reduction to put PSI-90 better than national median in HAC program</td>
</tr>
<tr>
<td>PSI-03 Pressure Ulcer</td>
<td>0.53</td>
<td>33% reduction to put PSI-90 better than national median in HAC program</td>
</tr>
<tr>
<td>PSI-13 Post-op Sepsis</td>
<td>5.54</td>
<td>20% reduction to put PSI-90 better than national median in HAC program</td>
</tr>
<tr>
<td>Overall 30 Day All Cause Readmission Rate</td>
<td>10.40%</td>
<td>Reduction to potentially avoid Medicaid penalty ($1 million)</td>
</tr>
<tr>
<td>CLABSI Rate</td>
<td>1.20</td>
<td>15% Reduction to achieve 2 additional points in VBP</td>
</tr>
<tr>
<td>CAUTI Rate</td>
<td>0.53</td>
<td>25% Reduction to achieve 1 additional point in VBP</td>
</tr>
<tr>
<td>C-Diff Rate</td>
<td>5.30</td>
<td>10% Reduction to potentially achieve 1 additional point in VBP</td>
</tr>
<tr>
<td>MRSA Rate</td>
<td>0.46</td>
<td>25% Reduction to achieve 2 additional points in VBP</td>
</tr>
<tr>
<td>SSI - Colon Rate</td>
<td>6.01</td>
<td>Return to FY 17 rate</td>
</tr>
<tr>
<td>SSI - Abdominal Hysterectomy Rate</td>
<td>1.54</td>
<td>Return to FY 17 rate</td>
</tr>
<tr>
<td>Hand Hygiene Rate</td>
<td>95%</td>
<td>Maintain FY 18 Target</td>
</tr>
<tr>
<td>Sepsis Mortality</td>
<td>0.92</td>
<td>Maintain FY 18 Target</td>
</tr>
<tr>
<td>HCAHPS Overall Rating</td>
<td>80.5%</td>
<td>90th percentile nationally</td>
</tr>
<tr>
<td>CGCAHPS Recommend</td>
<td>92.6%</td>
<td>65th percentile nationally</td>
</tr>
</tbody>
</table>
OSU Neuroscience Institute

• Neuroscience Clinical Quality Management Committee
• Monthly vs Quarterly meetings
• Institute wide measures
• Individual departmental metrics
  – Stroke
  – Psychiatry
  – Rehab
  – Surgery
  – Neurocritical Care
Quality Initiatives

Attachment I: Priority Criteria

The following criteria are used to prioritize clinical value enhancement initiatives to ensure the appropriate allocation of resources.

1. Aligns with strategic initiatives and is consistent with hospital’s mission, vision, and values

2. Reflects areas for improvement in patient safety, appropriateness, quality, and/or medical necessity of patient care (e.g., high risk, serious events, problem-prone)

3. Has considerable impact on our community’s health status (e.g., morbidity/mortality rate)

4. Addresses patient experience issues (e.g., access, communication, discharge)

5. Reflects divergence from benchmarks

6. Addresses variation in practice

7. Is a requirement of an external organization

8. Represents significant cost/economic implications (e.g., high volume)
2018 Neuroscience Committee Goals:

- Meet the UHC Risk Adjusted Mortality index of $\leq 0.76$
- Improve Hand Hygiene Compliance to meet Leadership expectation of $\geq 95$

- Achieve top decile (98%) in Stroke Core Measures - CMS/TJC Stroke Core Measures
- Door-to-Needle times $< 30$ minutes in $80\%$ of ischemic stroke patients eligible for rtPA.
- Achieve Door-to-Groin Puncture median time of $< 80$ minutes
- Achieve and maintain $>98\%$ compliance with all STK measures
- Achieve 95% compliance with documented dysphagia screens prior to PO intake
- Achieve hemorrhagic transformation rates of $< 6\%$
- Achieve top decile Vizient CSC’s Mortality Ranking for Ischemic and Hemorrhagic Strokes

- Achieve top decile status (80%) Patient and Family Satisfaction
- Dodd – Unplanned Discharges – show 10% improvement
- Harding Hospital – 10% Decrease the Aggression Events Rate to meet NANQI Benchmark/Magnet Rate
**MINUTES**

**190 Doan Conference Room**

<table>
<thead>
<tr>
<th>Attendance</th>
</tr>
</thead>
</table>
| **Present:** Tammy Moore, PhD, RN, NEA-BC (Chair)  
Ciaran Powers, MD  
John Kissel, MD  
Shahid Nimjee, MD  
Tammy Moore  
Amanda Lucas  
Anthon Brooks  
Victoria Schunemann, MD  
James Campbell  
Mary Ellen Clark, RN  
Cassandra England, RN  
Shelley Graf, PT  
Jennifer Flaherty, IP  
Angie Kincade, RN  
Dorina Harper, CNS  |
| **Absent:**  
Barbara Beech-Brown  
Emily Cacchione, RN  
Deepak Gulati, MD  
Maureen Musto, RN  
Sharon Heaton, RN  
Tracy Huffman, RN  
Kristen Huntoon, MD  
Vivian Lee, MD  
Zamda Lumbi, DQM  
Connie McCarthy, RN  |
| **Absent:** John McGregor (Chair)  
John Campo, MD  
Brad Elder, MD  
Jessica Glen, NP  
Noah Grose, NP  
Safdar Khan, MD  
Angela Harris, RN  
Natalie Lester, MD  
Russell Lonser, MD  
Jerry Mysiw, MD  
Ammar Shaikhouni, MD  
Beth Steinberg, RN  
Patricia Kinnaird, RN  |
| **Absent:** Michele Torbey, MD  
Diana Greene-Chandos, MD  
Tina Bodine  
Mendy Hollingshead  |