CLINICAL PERFORMANCE AND EMPLOYEE SAFETY METRICS

Executive Dashboard

NIH Clinical Center
October 2017
Patients’ Perceptions

• Overall Hospital Rating
• Would you Recommend the NIH CC?
Infection Control Metrics

- Hand Hygiene
- Central-Line Associated Bloodstream Infections
  - Whole-house
  - Intensive Care Unit
- Catheter Associated Urinary Tract Infections
  - Intensive Care Unit
  - Surgical Oncology
Hand Hygiene Adherence

Data collected by Unit-based

Data collected by Independent Auditors
Whole-house Central-Line Associated Bloodstream Infection (CLABSI) Rate

![Graph showing the trend of whole-house Central-Line Associated Bloodstream Infection (CLABSI) Rate from 2015-Q4 to 2017-Q2. The graph indicates a decrease in infections per 1000 catheter days, with a notable drop in 2015-Q4, followed by fluctuations up to 2017-Q2. The data shows that the rate was highest in 2015-Q4 with a value of n=7 infections, and it decreased to n=6 infections in 2016-Q4 and 2016-Q3. The rate then increased to n=7 infections in 2017-Q2.](image-url)
ICU Central-Line Associated Bloodstream Infection (CLABSI) Rate

Infections per 1000 catheter days

2015-Q4 2016-Q1 2016-Q2 2016-Q3 2016-Q4 2017-Q1 2017-Q2

ICU CLABSI Rate

n=1

NHSN ICU Benchmark

n=1
ICU Catheter-Associated Urinary Tract Infections

Infection per 1000 Foley days

- ICU CAUTI Rate
- NHSN ICU Benchmark

n=1
Surgical Site Infections (SSI) Rate

Infections per 100 Procedures

SSI Rate

Clinical Center Average

2015-Q4  2016-Q1  2016-Q2  2016-Q3  2016-Q4  2017-Q1  2017-Q2
Nursing Quality Metrics

- Falls
- Pressure Injury
- Medication Administration Barcoding
Inpatient Falls Rate

Falls Rate

Falls per 1000 patient days

NDNQI Benchmark

2015-Q4 2016-Q1 2016-Q2 2016-Q3 2016-Q4 2017-Q1 2017-Q2
The uptick in pressure injuries is largely due to injuries associated with long complex operative cases. An interdisciplinary team (nursing, surgery, anesthesia, wound care) reviewed OR positioning practices, use of compression stockings, oral breakdown related to endotracheal tubes, etc.
Emergency Response

- Code Blue and Rapid Response
  - Types of Patients
  - Type of Event
  - Patient Disposition
Code Blue Response: Types of "Patients"

<table>
<thead>
<tr>
<th></th>
<th>16-Qtr 4</th>
<th>17-Qtr 1</th>
<th>17-Qtr 2</th>
<th>17-Qtr 3</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpt</td>
<td>10</td>
<td>15</td>
<td>21</td>
<td>12</td>
<td>58</td>
</tr>
<tr>
<td>Outpt</td>
<td>12</td>
<td>9</td>
<td>11</td>
<td>13</td>
<td>45</td>
</tr>
<tr>
<td>Employee</td>
<td>14</td>
<td>16</td>
<td>8</td>
<td>9</td>
<td>47</td>
</tr>
<tr>
<td>Visitor</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>Incorrect Calls</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Legend:
- Inpt
- Outpt
- Employee
- Visitor
- Incorrect Calls
### Code Blue Response: Type of Event

<table>
<thead>
<tr>
<th></th>
<th>16-Qtr 4</th>
<th>17-Qtr 1</th>
<th>17-Qtr 2</th>
<th>17-Qtr 3</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Arrest</strong></td>
<td>1</td>
<td>2</td>
<td>5</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td><strong>Acute Emergency</strong></td>
<td>14</td>
<td>14</td>
<td>10</td>
<td>9</td>
<td>47</td>
</tr>
<tr>
<td><strong>Stable Event</strong></td>
<td>25</td>
<td>26</td>
<td>28</td>
<td>27</td>
<td>106</td>
</tr>
</tbody>
</table>

#### Number of Code Blue Responses by Type and Quarter:

- **Total** responses: 166
- **Arrest** responses: 10
- **Acute Emergency** responses: 47
- **Stable Event** responses: 106
## Code Blue Response: Patient Disposition

<table>
<thead>
<tr>
<th></th>
<th>16-Qtr 4</th>
<th>17-Qtr 1</th>
<th>17-Qtr 2</th>
<th>17-Qtr 3</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transfer to ICU</td>
<td>12</td>
<td>10</td>
<td>14</td>
<td>7</td>
<td>43</td>
</tr>
<tr>
<td>Transfer to OSH</td>
<td>13</td>
<td>15</td>
<td>8</td>
<td>10</td>
<td>46</td>
</tr>
<tr>
<td>Remained on Unit</td>
<td>4</td>
<td>6</td>
<td>14</td>
<td>13</td>
<td>37</td>
</tr>
<tr>
<td>Expired</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Released</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Other</td>
<td>7</td>
<td>8</td>
<td>4</td>
<td>7</td>
<td>26</td>
</tr>
</tbody>
</table>
### Rapid Response Team: Patient Disposition

<table>
<thead>
<tr>
<th></th>
<th>16-Qtr 4</th>
<th>17-Qtr 1</th>
<th>17-Qtr 2</th>
<th>17-Qtr 3</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ICU</strong></td>
<td>5</td>
<td>7</td>
<td>11</td>
<td>8</td>
<td>31</td>
</tr>
<tr>
<td><strong>Unit/Other</strong></td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td><strong>Remained on Unit</strong></td>
<td>5</td>
<td>10</td>
<td>14</td>
<td>13</td>
<td>42</td>
</tr>
</tbody>
</table>

**Number of Patients Dispositioned by Quarter:**

- **ICU:**
  - 16-Qtr 4: 5
  - 17-Qtr 1: 7
  - 17-Qtr 2: 11
  - 17-Qtr 3: 8
  - Total: 31

- **Unit/Other:**
  - 16-Qtr 4: 1
  - 17-Qtr 1: 0
  - 17-Qtr 2: 1
  - 17-Qtr 3: 0
  - Total: 2

- **Remained on Unit:**
  - 16-Qtr 4: 5
  - 17-Qtr 1: 10
  - 17-Qtr 2: 14
  - 17-Qtr 3: 13
  - Total: 42
Blood and Blood Product Use

- Crossmatch to Transfusion (C:T) Ratio
- Transfusion Reaction by Class
- Unacceptable Blood Bank Specimens
The NIH CC goal is to have a C:T ratio of 2.0 or less. Monitoring this metric ensures that blood is not held unused in reserve when it could be available for another patient.
Unacceptable Blood Bank Specimens

Percent unacceptable specimens

Jan-17  Feb-17  Mar-17  Apr-17  May-17  Jun-17  Jul-17  Aug-17  Sept-17

Percent specimens with collection problems

CC Threshold
Clinical Documentation

- Medical Record Completeness
  - Delinquent Records
  - “Agent for” Countersignature Adherence
  - Unacceptable Abbreviation Use
- Accuracy of Coding
Delinquent Records
(>30 days post discharge)
"Agent for" Orders Countersignature Compliance

% of Compliance vs. CC Goal from Jan-15 to Sep-17
"Do Not Use" Abbreviation Adherence

% appropriate use of abbreviations

Compliance with Abbreviation Use

CC Goal
Accuracy of Record Coding

New staff on-board; transitioning to ICD-10
Employee Safety

• Occupational Injury and Illness
Comparison of Occupational Injuries and Illnesses for CC Employees: 1st and 2nd Quarter 2017

- Total Recordable Cases (TRC) spiked with an increased number of Other Recordable Cases (ORC)
- Musculoskeletal trauma (M/S) without patient contact remains the most common OI
- Two-thirds of M/S cases (12/18) occurred in Pharmacy.
- Eight M/S cases occurred in the new Intravenous Admixture Unit (IVAU)
- Injuries in IVAU include repetitive motion injuries as well as body mechanics issues
- Hospital Safety and Occupational Medicine are working with IVAU staff to address ergonomic issues
Types of Occupational Injuries Reported in 2nd Quarter 2017
n=34

- M/S Trauma: 52%
- Wounds: 30%
- ERGO: 9%
- Other: 9%