The Quality Committee of the Board
February 25, 2019
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DEMONSTRATING VALUE: *Another Year to Compare*

1. Demonstrated Value through Superior Clinical Outcomes
2. Advocated for Outcome Comparison of Populations with Catastrophic Injuries

<table>
<thead>
<tr>
<th>2012 – 2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GAO</strong></td>
<td></td>
</tr>
<tr>
<td>Received letter with published response to GAO work. Dated December 13, 2018.</td>
<td></td>
</tr>
<tr>
<td><strong>CMS</strong></td>
<td></td>
</tr>
<tr>
<td>Granted a meeting to discuss performance comparisons for Catastrophic Rehabilitation</td>
<td></td>
</tr>
<tr>
<td><strong>AHA</strong></td>
<td></td>
</tr>
<tr>
<td>Identified by AHA as one of 7 Leading Rehabilitation Organizations</td>
<td></td>
</tr>
<tr>
<td>Onsite visit by AHA</td>
<td></td>
</tr>
<tr>
<td>Conclusion of survey resulted in publication of specific AHA findings for each hospital</td>
<td></td>
</tr>
<tr>
<td>Recognized during international presentation of findings at IHI</td>
<td></td>
</tr>
<tr>
<td><strong>GHA</strong></td>
<td></td>
</tr>
<tr>
<td>First Place Recipient of the 2019 PHA Quality and Patient Safety Award for Hospitals with 100-299 Beds</td>
<td></td>
</tr>
</tbody>
</table>

VALUE = QUALITY / COST

Shepherd Center Organizational Quality and Patient Safety: *CY 2018 Performance Report*
PATIENTS SERVED: By Impairment

- **301** SPINAL CORD INJURY
  - Includes: - 3 Amputation
- **417** BRAIN INJURY
  - Includes: - 135 Stroke
  - 35 Disorders of Consciousness
- **71** DUAL
- **30** NEURO PARALYZING
  - Includes multiple trauma and orthopedics
- **20** OTHER
- **95** SKIN

**ICU LEVEL OF CARE**

- **220** Direct Admits to ICU
- **374** Encounters Treated in ICU
- **1,856** ICU Patient Days
VOLUME MATTERS

Expertise in caring for people with severe traumatic injuries leads to superior patient outcomes.

Traumatic Volume
At Shepherd Center, 68% of rehabilitation patients have traumatic injuries, compared to only 7% of rehabilitation patients treated across the nation.*

Traumatic Volume
Case-Mix Index is a nationally accepted indicator of severity approved by the Centers for Medicare and Medicaid Services (CMS).

When compared, the traumatic injury patient population at Shepherd Center is more severe than the national average.
REHABILITATION MEDICAL COMPLEXITY

Shepherd Center Treats More Medically Complex Patients than the Region and Nation

Shepherd Center, Nation Adjusted, Region Adjusted

<table>
<thead>
<tr>
<th>Category</th>
<th>SC*</th>
<th>NA**</th>
<th>RA***</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traumatic Spinal Cord Injury</td>
<td>53.1%</td>
<td>50.7%</td>
<td>48.6%</td>
</tr>
<tr>
<td>Traumatic Brain Injury</td>
<td>81.7%</td>
<td>64.0%</td>
<td>62.0%</td>
</tr>
<tr>
<td>Stroke</td>
<td>52.3%</td>
<td>49.8%</td>
<td>49.0%</td>
</tr>
</tbody>
</table>

Patients in Category B, C, and D have additional medical comorbidities that impact rehabilitation. Patients in Category A, have no additional medical comorbidities that impact rehabilitation.

Shepherd Center Exceeds the Nation and Region Across all Major Patient Types Related to Medical Complexity

SC* | 53.1%
NA** | 50.7%
RA*** | 48.6%

<table>
<thead>
<tr>
<th>Category</th>
<th>SC*</th>
<th>NA**</th>
<th>RA***</th>
</tr>
</thead>
<tbody>
<tr>
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<td>53.1%</td>
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</tr>
<tr>
<td>Stroke</td>
<td>52.3%</td>
<td>49.8%</td>
<td>49.0%</td>
</tr>
</tbody>
</table>

*Shepherd Center, **Nation Adjusted, ***Region Adjusted
†Includes comorbidity tiers B, C, & D
SEVERITY OF ILLNESS

Shepherd Center treats patients who have more severe illnesses in addition to their traumatic injuries.

Medical Severity
Severity of Illness (SOI) classifications refer to the extent of physiologic decompensation or organ system loss of function as defined by 3M APR DRG™. The SOI are determined by secondary diagnoses, the patient’s age, and other factors.

The Most Severe Populations
Patients with an overall “Severity of Illness” classification of 3 or 4 are usually characterized by the presence of multiple severe secondary diagnoses. More than 80% of Shepherd Center patients had an SOI of 3 or 4.
**Patients with Spinal Cord Injury** who are treated at Shepherd Center achieve greater rehabilitation outcomes.

**Functional Gain**
Patients with spinal cord injury achieve greater gain of functional independence measure (FIM) at Shepherd Center. - Up to 3% greater than the nation*

**Discharge to Home**
More patients return home after undergoing rehabilitation at Shepherd Center for spinal cord injuries. - More than 16 percentage points higher than the nation*

Discharge to home includes returning to: home with or without planned assistance, a boarding home, transitional living residence, or assisted living residence.
Patients with Brain Injury who are treated at Shepherd Center achieve greater rehabilitation outcomes.

**Functional Gain**
Patients with brain injury achieve greater gain of functional independence measure (FIM) at Shepherd Center.
- Up to 36% greater than the nation*

**Discharge to Home**
More patients return home after undergoing rehabilitation at Shepherd Center for brain injuries.
- More than 21 percentage points higher than the nation*

Discharge to home includes returning to: home with or without planned assistance, a boarding home, transitional living residence, or assisted living residence.

*Nation is the UDS MR “nation adjusted” scores for CY 2018
Patients with Stroke who are treated at Shepherd Center achieve greater rehabilitation outcomes, despite higher acuity upon admission.

**Functional Gain**
Patients with stroke achieve greater gain of functional independence measure (FIM) at Shepherd Center.
- Up to 4% greater than the nation*

**Discharge to Home**
More patients return home after undergoing rehabilitation at Shepherd Center for stroke.
- More than 16 percentage points higher than the nation*

Discharge to home includes returning to: home with or without planned assistance, a boarding home, transitional living residence, or assisted living residence.
Patients who need a ventilator treated at Shepherd Center achieve highly favorable ventilator-weaning rates across all injury types

**Diaphragm Pacing**
- Shepherd Center played an integral role in the implementation of the Diaphragmatic Pacing System (DPS).
- The first Shepherd patient was implanted in 2006.
- Since then, our well-respected program has been a model and support for other hospitals that are implementing DPS or in need of education on the system.
- Patients on DPS are considered not fully weaned although they are provided this alternative device.

**Outcomes**

**2018 Percentage of Ventilator Weaning According to the Level of Injury**

<table>
<thead>
<tr>
<th>Injury Type</th>
<th>Level of Injury</th>
<th>Total Vent Patients</th>
<th>Patients Weaned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stroke</td>
<td>8</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Stroke</td>
<td>C1-2</td>
<td>22</td>
<td>17</td>
</tr>
<tr>
<td>Stroke</td>
<td>C3</td>
<td>11</td>
<td>9</td>
</tr>
<tr>
<td>Stroke</td>
<td>C4</td>
<td>18</td>
<td>13</td>
</tr>
<tr>
<td>Stroke</td>
<td>C5-C7</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Stroke</td>
<td>T1-T2</td>
<td>9</td>
<td>9</td>
</tr>
</tbody>
</table>

Ventilator data is validated annually by David DeRuyter, MD, Medical Director, ICU and Pulmonary Services.
CLINICAL EXPERTISE RESULTS IN SUSTAINABLE OUTCOMES & COST AVOIDANCE

Reliability:
Transfers to Acute Care
• Shepherd Center’s Intensive Care Unit and team of experts – including physiatrists, internal medicine/pulmonology intensivists and specialized clinicians – collaboratively manage the most complex, traumatic patient care needs.
• Access to this degree of expertise results in fewer patients who require transfer to an acute level of care and avoids the cost and burden of these transfers.
• In 2018, Shepherd Center transferred patients to an acute care facility 8 percentage points less than other rehabilitation hospitals in the nation.

Sustainability:
Ventilator Associated Pneumonia
• Ventilator management is critical when working with patients who have spinal cord injuries.
• This population of patients is highly susceptible to VAP, due to the lack of ability to voluntarily support self cough, deep breathing, and rolling side-to-side.
• 2018 is the twelfth full calendar year without any incidence of VAP at Shepherd Center.

OUTCOMES

Percent of Patients Transferred to Acute Care

Cost Avoidance**

> $355,000
2017

> $485,000
2018

*Nation is the UDS MR “nation adjusted” scores for CY 2018
**Based on published, $6,840 cost per transfer to acute facility, and difference in Shepherd and Nation Transfer rate to Acute Level of Care

VAP (Ventilator Associated Pneumonia)
> 12 Years Without a VAP: based on the CDC definition

<table>
<thead>
<tr>
<th>Year</th>
<th>since 2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td></td>
</tr>
<tr>
<td>3,700+</td>
<td>Device Days: Free from Harm</td>
</tr>
<tr>
<td>140</td>
<td>Patient Discharges: kept free from Ventilator Associated Pneumonia Harm</td>
</tr>
<tr>
<td>~$2.9M</td>
<td>Cost Avoidance for Shepherd patients</td>
</tr>
</tbody>
</table>
OVERALL HARM RATE: Compared to Nation

Shepherd Centers’ Harm Rate 23% Below National Goal for Acute Care

TOTAL HARMS PER 1,000 DISCHARGES

DECREASE  ↓  C DIFF  21  ↓  FALLS WITH HARM  12  ↑  ADE: OPIOID REVERSAL  0  →
NO CHANGE  →  MRSA BACTEREMIA  2  →  ADE: INR  0  →  PRESSURE INJURY WITH HARM  4  ↑
INCREASE  ↑  CLABSI  0  ↓  VAP  0  →  ADE: BLOOD GLUCOSE  0  →  CAUTI  31  ↑

*Harm Rate Includes the Following Measures: CLABSI, CAUTI, C. Diff, MRSA Bacteremia, VAP, Falls with Harm, ADE: INR, ADE: Blood Glucose, ADE: Opioid Reversal, Pressure Injury with Harm
OVERALL HARM RATE: More Patients Kept Free from Unintentional Harm

Increased Total Number of Harms* by 3% from CY 2017

*Total Harms includes the Following Measures: CLABSI, CAUTI, C. Diff, MRSA Bacteremia, VAP, Falls with Harm, ADE: INR, ADE: Blood Glucose, ADE: Opioid Reversal, Pressure Injury with Harm
2018 FOCUS
Maintain established best practices while working with peer organizations to prove the difference in risk factors between populations

Reinforce CAUTI “Bundle” through continued education of Nursing

Drilldown into all infections to identify adherence to CAUTI “Bundle” Elements

Analyze efficacy of and adherence to CAUTI Diagnostic and Treatment guidelines

Meet with industry leaders including CMS to demonstrate the elevated risk in the Tetraplegic population

CAUTI: Maintain Best Practice and Increase Awareness

OUTCOMES

CAUTI Rate per 1,000 Foley Days

All CAUTI Rate

Tetraplegia CAUTI Rate

Non-Tetraplegia CAUTI Rate

2016 2017 2018

3.88 2.29 2.89
26% REDUCTION FROM 2016

6.95 3.39 4.63
33% REDUCTION FROM 2016

1.38 1.39 1.5
9% INCREASE FROM 2016

All Patient Foley Days by Month

18% Reduction in Foley Days in 2018

Shepherd Center Organizational Quality and Patient Safety: CY 2018 Performance Report
**2018 Milestones: Driving Down CAUTI**

- **JAN**
  - Began data collection efforts with ASIA organizations to benchmark CAUTIs within the Tetraplegic population across multiple organizations

- **FEB**
  - Re-educated nurses related to best practices with BioFlo and Catheter Care
  - Began data collection efforts related to Shepherd UTI Guidelines for testing and treatment

- **MAR**
  - Conducted a drilldown of HAI CAUTIs to evaluate use of best practices
  - Complete Theraworx in-services: re-education for the nursing staff about the importance and practice of using Theraworx for Foley care

- **APR**
  - Changed patient bathing practices to use ReadyBath disposable wipes and end the use of washbasins

- **MAY**
  - Presented to CMS about stratifying the Quality Reporting System based on traumatic injury populations, specific to CAUTI

- **JUN**
  - Began data collection efforts with ASIA organizations to benchmark CAUTIs within the Tetraplegic population across multiple organizations

- **JUL**
  - Re-educated nurses related to best practices with BioFlo and Catheter Care
  - Began data collection efforts related to Shepherd UTI Guidelines for testing and treatment

- **AUG**
  - Conducted a drilldown of HAI CAUTIs to evaluate use of best practices
  - Complete Theraworx in-services: re-education for the nursing staff about the importance and practice of using Theraworx for Foley care

- **SEP**
  - Changed patient bathing practices to use ReadyBath disposable wipes and end the use of washbasins

- **OCT**
  - Presented to CMS about stratifying the Quality Reporting System based on traumatic injury populations, specific to CAUTI

- **NOV**
  - Began data collection efforts with ASIA organizations to benchmark CAUTIs within the Tetraplegic population across multiple organizations

- **DEC**
CDI: Increasing Prevention and Diagnostic Capability

2018 FOCUS
Comprehensive approach to prevent Clostridioides difficile infection (CDI), reduce transmission, and improve diagnostic capability.

- Identify community acquired CDI earlier to begin treatment and isolation
- Change in Isolation Practice to reduce Transmission
- Follow established best practice of prophylactic dose of antibiotics for patients with history of CDI to prevent recurrence
- Update diagnostic testing to identify when active toxins are present and most infectious
- Update guidelines to use the most effective antibiotic as first line treatment which may reduce risk of recurrence

OUTCOMES

Inpatient CDI Rate per 1,000 Patient Days

<table>
<thead>
<tr>
<th>Year</th>
<th>Quarter</th>
<th>CDI Rate</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>Q2 2018</td>
<td>0.49</td>
<td>23</td>
</tr>
<tr>
<td>2018</td>
<td>Q1 2018</td>
<td>0.78</td>
<td>9</td>
</tr>
<tr>
<td>2018</td>
<td>Q2 2018</td>
<td>0.42</td>
<td>5</td>
</tr>
<tr>
<td>2018</td>
<td>Q3 2018</td>
<td>0.52</td>
<td>6</td>
</tr>
<tr>
<td>2018</td>
<td>Q4 2018</td>
<td>0.08</td>
<td>1</td>
</tr>
</tbody>
</table>

Positive CDI Tests on Admission Day 1 to 3

Effect of Change:
The optimization of CDI screening practices identified infected patients sooner, which reduced the HAI CDI rate by:

- more accurately identifying community acquired CDI infections and
- allowing for isolation to begin sooner, reducing the risk of infecting other patients.
Shepherd Center Organizational Quality and Patient Safety: CY 2018 Performance Report

2018 Milestones: Driving Down CDI

- Implemented Enteric Precautions
- Updated CDI guidelines to include Vancomycin oral therapy as first line treatment, as recommended in ISDA guidelines

- Presented CDI guidelines at Medical Intelligence meeting

- Changed room cleaning product to Oxycide
- Changed patient bathing practices to use ReadyBath disposable wipes and end the use of washbasins

- Began investigating 2-step method for diagnosis of CDI
- Added prophylactic dose of Vancomycin to CDI guidelines

- Practice changed to screen patients on admission Day 1-3 for single instance of Bristol 6 or 7 stool using a standing order

- Changed room cleaning product to Oxycide
- Changed patient bathing practices to use ReadyBath disposable wipes and end the use of washbasins

- Admission CDI protocol approved by P&T and Medical staff

- Began investigating 2-step method for diagnosis of CDI
- Added prophylactic dose of Vancomycin to CDI guidelines

- Practice changed to screen patients on admission Day 1-3 for single instance of Bristol 6 or 7 stool using a standing order

- Presented CDI guidelines at Medical Intelligence meeting

- Started using new 2-step testing in-house at Shepherd Center

- Published new CDI prophylactic order set in Soarian
- Present new method for CDI diagnostic testing at Medical Intelligence Meeting
**2018 FOCUS**

Improve outcomes at home by expanding scope of TSP services to better meet patient medical and equipment needs post discharge, follow more high-risk patients, and increase connections prior to discharge.

- Worked with Case Management to identify and connect with high risk clients further in advance of discharge
- Expanded scope of referrals to include patients with pending specialty equipment needs
- Increased focus on medication management by expanding clinical capabilities of TSP team
- Worked with Epic build team to include TSP documentation directly into new EMR

**OUTCOMES**

30-Day Readmission Rate

*Based on comparing # of readmissions for discharges from January to November 2017 and 2018

**N=52 Patients Surveyed to Date**

**By the Numbers**

- **32%** Shepherd patients discharged <1 yr post injury were followed by TSP
- **385** Clients Served in TSP in 2018
- **96.6%** Client Satisfaction for “Would you recommend TSP?”

**SUSTAIN SUCCESS**
### 2018 Milestones: Driving Down Readmissions

<table>
<thead>
<tr>
<th>Month</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>JAN</td>
<td>Began asking health confidence questions in first phone call. Reported to CM council with TSP data, identified that high risk patients who discharge on a Friday miss out on TSP support over the weekend.</td>
</tr>
<tr>
<td>FEB</td>
<td>Implemented MSC Pilot program to offer a 1-2 week follow-up appointment.</td>
</tr>
<tr>
<td>MAR</td>
<td>With a multidisciplinary team from research, nursing, physicians, and others, finalized UTI treatment protocol for emergency physicians treating patients discharged from Shepherd Center.</td>
</tr>
<tr>
<td>APR</td>
<td>Submitted grant to expand Peer Support Program and compare outcomes with TSP.</td>
</tr>
<tr>
<td>MAY</td>
<td>Added expanded healthcare utilization questions to any patient who readmitted or visited an ER &lt;30 days post discharge.</td>
</tr>
<tr>
<td>JUN</td>
<td>Hired a 2nd RN Case Manager for TSP team to increase medical capabilities.</td>
</tr>
<tr>
<td>JUL</td>
<td>Hired a 2nd RN Case Manager for TSP team to increase medical capabilities.</td>
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</tr>
<tr>
<td>DEC</td>
<td>Hired a 2nd RN Case Manager for TSP team to increase medical capabilities.</td>
</tr>
</tbody>
</table>
FALLS: Sustain Evidence-Based Practices

2018 FOCUS
Reducing falls in stroke patient population & sustaining evidence based practice initiatives from 2017

Seatbelt alarm in first three days of admission for every new ABI/TBI/CVA patient for fall risk assessment

Introduction of Avasys telemonitoring for patient safety

Awareness initiatives center-wide to prevent repeat falls

2018 Outcomes

Fall Rate per 1,000 Patient Days

<table>
<thead>
<tr>
<th>Year</th>
<th>Assisted Falls</th>
<th>Unassisted Falls</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>36</td>
<td>62</td>
</tr>
<tr>
<td>2018</td>
<td>29</td>
<td>61</td>
</tr>
</tbody>
</table>

Trends in Severity of Falls from Unintentional Harm

- **2015**: 29 Assisted Falls, 61 Unassisted Falls
- **2016**: 36 Assisted Falls, 62 Unassisted Falls
- **2017**: 29 Assisted Falls, 61 Unassisted Falls
- **2018**: 36 Assisted Falls, 62 Unassisted Falls

*NDNQI Harm Classifications
**Greater accuracy in 2018 reporting. New process for identifying harm.
Every new ABI/TBI/CVA patient gets seatbelt alarm in the first three days of admission for fall risk assessment & determination for additional restraint.

Introduction of Avasys telemonitoring system for patient safety and additional monitoring.

Initiative started to create visual awareness in staff to reduce repeat falls.

Identified and redistributed beds in the hospital to ensure that narrower-gap railed beds are used with patients with ABI/Stroke to prevent falls in that population.

(All center) Email communication post inpatient fall to heighten awareness and prevent future falls due to increased risk.
### PRESSURE INJURY: Drive Reliable Assessment and Documentation

#### 2018 FOCUS

- Maintain reliability of pressure injury documentation
- Ensure reliability in pressure injury assessment and documentation
- Reduce pressure injury due to cast/splint
- Obtain pressure mapping equipment for inpatient use
- Hardwire shoe tolerance process for initiating new shoe wearing

#### OUTCOMES

**Hospital-Acquired Pressure Injuries**

*Rate per 1,000 pt Days*

<table>
<thead>
<tr>
<th>Year</th>
<th>Rate (per 1,000 pt Days)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>2.2</td>
</tr>
<tr>
<td>2018</td>
<td>1.6</td>
</tr>
</tbody>
</table>

**CMS Definition: Pressure Injuries with “Harm”**

*Number of Patients with Hospital Acquired Pressure Injuries: Present on Discharge*

- **2017**: 3 Patients Out of 862 Discharges
- **2018**: 4 Patients Out of 934 Discharges

*CMS Definition: Hospital Acquired Pressure Injury stage 2, 3, 4 present on discharge*
2018 Milestones: *Driving Down Pressure Injury*

- **JAN**: Permanent Cast/Splint Champion position instituted in ABI units for nights
- **FEB**: Test of change: Trial of process designed to reduce HAPI due to changes in equipment (shoe, mattress & wheelchair)
- **MAR**: Initiative started to obtain and train staff on pressure mapping equipment in inpatient
- **APR**: All SCI 4th & 5th floor therapists trained on pressure mapping equipment
- **MAY**: Test of change: Workgroup chose to pursue shoe tolerance process
- **JUN**: Skills day education focused on bed padding and positioning
- **JUL**
- **AUG**
- **SEP**
- **OCT**
- **NOV**
- **DEC**
### COST OF UNINTENTIONAL HARM: Summary

<table>
<thead>
<tr>
<th>CY2018 Cost of Harms</th>
<th>CLABSI</th>
<th>CAUTI</th>
<th>C. Diff</th>
<th>MRSA Bacteremia</th>
<th>Falls with Harm</th>
<th>PI with Harm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Harms</td>
<td>70</td>
<td>31</td>
<td>21</td>
<td>2</td>
<td>12</td>
<td>4</td>
</tr>
<tr>
<td>2018 Total Cost</td>
<td>$229,844</td>
<td>$73,543</td>
<td>$52,670</td>
<td>$47,617</td>
<td>$15,737</td>
<td>$40,277</td>
</tr>
</tbody>
</table>

#### 2018 TOTAL COST BY CATEGORY

<table>
<thead>
<tr>
<th>Category</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharmacy</td>
<td>$114,908</td>
</tr>
<tr>
<td>Radiology</td>
<td>$19,927</td>
</tr>
<tr>
<td>Laboratory</td>
<td>$24,311</td>
</tr>
<tr>
<td>Procedures</td>
<td>$5,834</td>
</tr>
<tr>
<td>Nursing Care</td>
<td>$2,800</td>
</tr>
<tr>
<td>Supplies/Nutrition</td>
<td>$62,064</td>
</tr>
</tbody>
</table>

*Cost is based on total charges to the patient, directly related to treating the harm event

### ANALYSIS

- CAUTI has the highest total cost of harm due to the volume of events and pharmacologic expense.
- Supply cost associated with C. Diff increased in 2018 due to the new isolation practices.
- MRSA Bacteremia has the highest cost per harm event and involves most treatment categories.
PATIENT EXPERIENCE

Patients treated at Shepherd Center rate their care and experience better than patients treated at other facilities across the nation.

Shepherd Center's **Overall Rating of Care** exceeds the national average.

Patients rated their overall care as 94 out of 100, demonstrating exceptional medical and rehabilitation care for patients and families.

Patients treated at Shepherd Center are more **Likely to Recommend** the facility to others, when compared to the national average.

Patients scored Shepherd Center 96 out of 100 when asked if they would recommend us to their friends and family, compared to 92 for the national average.

"I can’t say enough good things - the overall experience was phenomenal & everyone was fantastic!"

"We are very pleased with the care our son received at the Shepherd Center. I would highly recommend this center to anyone who needs it."

*Nation reflects Press Ganey’s “All Hospital Custom” benchmark for like facilities using the rehabilitation survey in CY 2018*
CULTURE OF PATIENT SAFETY: Outperform Nation and State Across All Categories

ANALYSIS
Overall respondent rate decreased by 15% of participating clinicians

SC year to year reveals, of the 12 Behavioral Categories:
- 12/12 increased by 2-10 percentage points
- 2/12 increased by 10 percentage points
- 12/12 exceeded both the Nation and the State of Georgia

OUTCOMES
National Culture of Patient Safety Survey*
Average % of Positive Response for Shepherd and comparison to both the National and the State of Georgia

<table>
<thead>
<tr>
<th>Behavioral Categories</th>
<th>2017 N = 415</th>
<th>2018 N = 351</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shepherd (S)</td>
<td>Nation (N)</td>
<td>Georgia (G)</td>
</tr>
<tr>
<td>Teamwork Within Units</td>
<td>87%</td>
<td>90%</td>
</tr>
<tr>
<td>Supervisor/Manager Expectations &amp; Actions Promoting Patient Safety</td>
<td>85%</td>
<td>88%</td>
</tr>
<tr>
<td>Organizational Learning - Continuous Improvement</td>
<td>79%</td>
<td>83%</td>
</tr>
<tr>
<td>Management Support for Patient Safety</td>
<td>87%</td>
<td>90%</td>
</tr>
<tr>
<td>Overall Perceptions of Patient Safety</td>
<td>77%</td>
<td>81%</td>
</tr>
<tr>
<td>Feedback &amp; Communication About Error</td>
<td>73%</td>
<td>75%</td>
</tr>
<tr>
<td>Communication Openness</td>
<td>67%</td>
<td>73%</td>
</tr>
<tr>
<td>Frequency of Events Reported</td>
<td>67%</td>
<td>71%</td>
</tr>
<tr>
<td>Teamwork Across Units</td>
<td>73%</td>
<td>78%</td>
</tr>
<tr>
<td>Staffing</td>
<td>63%</td>
<td>73%</td>
</tr>
<tr>
<td>Handoffs &amp; Transitions</td>
<td>50%</td>
<td>56%</td>
</tr>
<tr>
<td>Nonpunitive Response to Errors</td>
<td>57%</td>
<td>67%</td>
</tr>
</tbody>
</table>

*2018 Hospital Culture of Safety Survey Results – administered by the Georgia Hospital Association (GHA) in May 2018
2018 SUMMARY OF ORGANIZATIONAL PERFORMANCE

► GOAL: Sustain reliable care delivery, evidenced by a reduction of 10% in the overall Harm Rate

**EXPECTED**

10% Reduction in Rate

**ACTUAL**

5% Reduction in Rate

**EVIDENCE:**

- pg. 11/12 - Overall Harm Rate
- pg. 13 - CAUTI
- pg. 15 - CDI
- pg. 19 - Falls
- pg. 21 - Pressure Injury

**COMMENTS:** While the overall harm count increased by 2 harms, the harm rate showed a 5% reduction in harm per 1,000 patient days because inpatient volume increased in 2018.

► GOAL: Hardwire national evidence-based best practice to ensure timely medical management of VTE and Sepsis

**EXPECTED**

VTE and Sepsis Complete

**ACTUAL**

VTE Complete, Sepsis on hold (50%)

**COMMENTS:** Facilitated by PI Advisors, Shepherd specific criteria for VTE were developed and adjusted to fit within the Epic framework. The same collaborative efforts were put forth for Sepsis although unable to be successfully launched at this time. The clinical criteria for Sepsis triggers in the Acute Care population is vastly different when treating the clinical symptoms of patients with SCI/BI. In the best interest of the Shepherd patients, the decision has been made to defer the Epic launch for Sepsis until post Epic “Go Live” when criteria can be refined by the Medical Staff.

► GOAL: Deliver and demonstrate clinical value through the reduction of variation in medical management and elimination of non-value added steps to result in lower cost of care

**EXPECTED**

Reduction in variation

**ACTUAL**

N/A

**COMMENTS:** Activity was halted on this goal due to the high resource consumption of the Epic build.
2019 ORGANIZATIONAL IMPROVEMENT DIRECTION

► Continue to promote collaborative and multidiscipline culture to achieve organizational success:
  – Promote overall reduction of harm rate through reliable care delivery
  – When inefficiencies are identified, support optimization efforts in Epic workflow and redesign

► Support Medical Staff efforts to:
  – Hardwire national evidence-based practice to ensure timely medical management for Sepsis and other population specific guidelines

► Drive Reliability in Patient Safety by:
  – Launching “Good Catch” program to promote recognition of mindful / alert behavior in clinical and operational areas. The ultimate intent is to harness the triggers that alerted the individual and determine if that strategy could be replicated in other areas to enhance safety.