Goal

To increase the percentage of patients transferred back to rehabilitation after ED evaluation.

Background

- This project highlights how nurse leaders from a nationally ranked post-acute rehabilitation hospital led the way in reducing acute care readmissions through the development and implementation of a standard communication tool despite extraordinary circumstances resulting from the pandemic.
- Hospital readmissions have negative impacts to patient care which include higher financial costs, program interruption, and decreased overall functional recovery.
- Information and Analytics Services estimates that one year, approximately 19,000 patients were admitted to the acute care hospital.

Impact

- We noticed 14 percent of our rehabilitation patients were returning to rehabilitation after being evaluated by an emergency department (ED) physician.
- After we investigated the issue, we identified there was a communication gap between the ED physicians and rehabilitation physicians.
- As a result, a communication tool was created to enhance rehabilitation and emergency physicians and nurses from both transferring and receiving hospitals viewed critical information from the patient's medical record.
- The tool fostered communication among both healthcare teams which encouraged the emergency physician to critically evaluate whether a patient's care needs could continue to be addressed at the rehabilitation hospital.

Improvement Process

- We determined our improvement plan by using the Plan, Do, Study, Act methodology.
- The project’s goal was “to provide optimal care and prevent potentially preventable acute care hospital readmissions of patients that transferred acutely to the ED from rehabilitation by increasing the percentage of patients that transferred back to rehabilitation after being admitted to the acute care hospital.”

Three Key Areas for Improvement:

1. Being able to accurately track and identify the number of patients that transferred acutely to rehabilitation to the ED that returned without being admitted to the acute care hospital.
2. Create a process for the ED to be able to easily communicate with rehabilitation.
3. Educate the emergency departments on the care that could be provided by inpatient rehabilitation.

Results

- Implementation of the ED Communication Tool (Figure 1) helped improve clinical outcomes of acutely transferred patients and increased transfer communication, when necessary, between the ED and rehabilitation.

Figure 1: Emergency Department Communication Tool

- From 2020 to 2022, it is evident that the percentage of acutely transferred patients that returned to rehabilitation after ED evaluation increased.

Figure 4: 2021 Chief Complaints of Return Patients with ED Visits

<table>
<thead>
<tr>
<th>Complaint</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sepsis/Symptoms of Infection</td>
<td>7%</td>
<td>11%</td>
<td>11%</td>
</tr>
<tr>
<td>Respiratory</td>
<td>27%</td>
<td>27%</td>
<td>28%</td>
</tr>
<tr>
<td>Pain</td>
<td>11%</td>
<td>11%</td>
<td>11%</td>
</tr>
<tr>
<td>Hypotension</td>
<td>20%</td>
<td>13%</td>
<td>9%</td>
</tr>
<tr>
<td>Nausea/Vomiting</td>
<td>11%</td>
<td>13%</td>
<td>13%</td>
</tr>
<tr>
<td>Cardiac Issues</td>
<td>11%</td>
<td>13%</td>
<td>13%</td>
</tr>
</tbody>
</table>

Figure 5: 2022 Chief Complaints of Return Patients with ED Visits

<table>
<thead>
<tr>
<th>Complaint</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sepsis/Symptoms of Infection</td>
<td>4%</td>
</tr>
<tr>
<td>Respiratory</td>
<td>12%</td>
</tr>
<tr>
<td>Pain</td>
<td>13%</td>
</tr>
<tr>
<td>Hypotension</td>
<td>14%</td>
</tr>
<tr>
<td>Nausea/Vomiting</td>
<td>25%</td>
</tr>
<tr>
<td>Cardiac Issues</td>
<td>28%</td>
</tr>
</tbody>
</table>

- After initial implementation, we identified that the form was not being sent with all patients. Nursing implemented a process change of stapling the form outside of the envelope used to transport other information.
- In 2021, 17.31% of acutely transferred patients returned to rehabilitation after ED evaluation. This exceeded both the target goal (15.27%) and stretch goal (15.96%). In all 45 incidences in 2021 when patients were transferred back to rehabilitation after ED evaluation, all but one would have fulfilled the criteria for an acute care hospital readmission. In 2022, 17.56% of patients transferred back to rehabilitation after ED evaluation indicating that the project results were sustained.

Figure 3: Annual Percentage of Patients that Return to Rehabilitation after ED Evaluation

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage of Patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>13.88%</td>
</tr>
<tr>
<td>2021</td>
<td>17.31%</td>
</tr>
<tr>
<td>2022</td>
<td>17.56%</td>
</tr>
</tbody>
</table>

- Early results in project implementation were realized in the second half of 2021. From January to June of 2021, 2.5 patients per month transferred back to rehabilitation after ED evaluation. After the process was hardened in July 2021, 5 patients per month transferred back between July to December of 2021. This is evident by the positive trendline shown in Figure 2.

Results (cont.)

- After the implementation of the ED Communication Tool, all but one would have fulfilled the criteria for an acute care hospital readmission. In 2022, 17.56% of patients transferred back to rehabilitation after ED evaluation indicating that the project results were sustained.

Figure 2: Number of Patients Returning to Rehabilitation after ED Evaluation by Month

- The tool fostered communication among both healthcare teams which encouraged the emergency physician to critically evaluate whether a patient’s care needs could continue to be addressed at the rehabilitation hospital.

Implication

- A nurse-physician leader partnership is influential in creating strategies that improve not only patient care but reducing hospital costs.

Goal

Primary Objective:

To increase the percentage of patients transferred back to rehabilitation from the ED by 10% (Target), 15% (Stretch) by the end of 2021 by designing and implementing an ED Communication Tool.

Primary Goals/Metrics:

2021 Outcome Measure: Increase the percentage of acute care transfers that return to rehabilitation after being seen in the Emergency Department.

Service Line Goal: To increase the percentage of acutely transferred patients that return to rehabilitation after being seen in the ED by 10% from 13.88% to 15.27% (Target Goal) and 15.96% (Stretch Goal).

Lessons Learned

- Although nurse leaders primarily led this work, other members of the health care team, such as staff nurses, physicians, quality improvement specialists, pharmacy, professional development, and liaisons can play a huge role in ensuring safety and quality remain at the forefront of patient care.
- Maintaining open communication with the health-care team and establishing clear expectations are essential to executing a plan.
- Creating a culture of shared decision making and connecting the work back to the overall purpose is critical to efficiency of work.

Practical Takeaways

- Leaders must be resilient, determined and focused when leading teams and initiatives in challenging times.
- Benefits of interdisciplinary teamwork includes best practice sharing, staff empowerment, and overall safety and quality.

References


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