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Science Internship Program: Nursing Care

Civic Education
Office of Government and Community Relations
Callie Truong
Science Internship Program: Nursing Care
Analyzing the Possible Causes for Prolonged Length of Stay in the Rapid Observation Unit

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Abstract

• Length of stay is one of the most important factors in the Rapid Observation Unit (ROU).

• Recently, patients’ hours have been increasing.

• We found that patients’ prolonged length of stay were mostly caused by their medical conditions and delays within the hospital staff.
Background

- **Rapid Observation Unit (ROU)** – a clinical unit that discharges patients within a timely manner.
  - **Length of Stay (LOS)** should be between 18 to 24 hours or less. ROU patients come from emergency departments.

- They are admitted to ROU for further observation and some go through consultations.
Patients’ LOS are being delayed to longer than 24 hours.

The goal of our study is to find out the main causes for prolonged LOS in the ROU.

Create any recommendations that can possibly prevent delays in the patients’ LOS.
Hypothesis

• Some patients have prolonged LOS due to uncontrollable factors which include:
  – Physicians’ intuition to keep them for further monitoring
  – A change in their medical condition such as a new diagnosis
  – Treatment showed little to no improvement

• Patients’ LOS delays are hospital-related.
Methodology

- Surveyed the staff’s opinion on prolonged LOS

<table>
<thead>
<tr>
<th>Rapid Observation Unit (Research Project)</th>
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<tbody>
<tr>
<td>Causes for Prolonged Length of Stay</td>
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</table>

The purpose of this survey is to analyze staff opinion on what are the main causes for prolonged length of stay for patients that are admitted to the Rapid Observation Unit. This data will be used to see what causes should be researched to see if they correlate with length of stay.

1. What is your name? (Optional)

2. Which of the following best describes your current occupation?

3. Please rank the possible causes for prolonged length of stay from 1 to 5. 1 being the most significant cause and 5 being the least significant cause.

<table>
<thead>
<tr>
<th>Cause</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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<tbody>
<tr>
<td>Type of Diagnosis</td>
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<tr>
<td>Two or More Conditions</td>
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<tr>
<td>(Acuity)</td>
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<td>Age of Patient</td>
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<td>Past Level of Patient</td>
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<td>Social Issues (e.g., delirium, the use of narcotics, insurance, etc.)</td>
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<td>Discharge to Extended Stay or Skilled Facility</td>
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<tr>
<td>Number of Visits</td>
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<td>Delays in Orders</td>
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<td>Noncompliance of Patient</td>
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<td>Admission Time (Stay vs. Night, Presence vs. Weekend, etc.)</td>
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<tr>
<td>Other (please specify)</td>
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</table>

4. If you specified an “Other”, what would you rank it?

5. What criteria should exclude (or include) admission of a patient?

6. Do you have any suggestions to reduce the average length of stay? If yes, please explain.

7. Do you have any other comments regarding causes for prolonged length of stay?

Thank you so much for completing this survey!

Callie Truong, Nursing Care Intern
Berea-Midpark High School Student
Methodology

• Chose the patients staying longer than 24 hours
  – Patient sample size: 102
• Asked their nurses what they thought were the reasons for their prolonged LOS in the ROU
  – Added additional information from EPIC medical records
• Made a general list of causes
Data

Survey Data: 14 Responses

• Ranked 1 (most significant causes):
  – Type of Diagnosis
  – Discharge to Extended Stay or Skilled Facility
  – Number of Consults

• Ranked 2:
  – Two or More Comorbidities (Acuity)
  – Age of Patient
  – Delay of Orders
  – Admission Time
Data (cont.)

- Ranked 3:
  - Social Issues
  - Noncompliance of Patient (tied for 3 and 4)
- Ranked 4:
  - Pain Levels of Patient
  - Noncompliance of Patient (tied for 3 and 4)
- Ranked 5:
  - No cause received a ranking of 5

Most of the staff agreed that patients with chronic conditions and/or multiple consults should be excluded from the ROU.
Results (cont.)

- Explanation of each cause:
  - IV meds: The time it takes to transfuse IV medications
  - Type of Diagnosis: Diagnoses that require a LOS greater than 24 hours (usually cellulitis and kidney stones)
  - Social Issues: Insurance status and personal life of patients
  - Medical Condition: Showed no improvement as expected, patients are kept for further monitoring per the physician’s orders, or there was a change in their medical condition
Results (cont.)

• Explanation of each cause:
  – Delay of Tests, Delay of Orders, Delay of Procedure, Delay of Primary, and Delay of Consultant are causes that relate to the efficiency of the hospital
  – # of Consults: Multiple consults can hold up a patient’s LOS
  – Discharge to ES/SF: Delay in discharging a patient to an extended stay in an inpatient unit or skilled nursing facility
  – Other: Noncompliance of patient, patient fall, holiday weekend, length of blood transfusions, etc.
Conclusions

- 20 patients had multiple reasons for delay.
- 37 patients stayed longer because of their medical conditions, which is an uncontrollable factor.
- However, 48 patients’ LOS were prolonged due to delays that are hospital-related, meaning it possibly could have been prevented by the ROU team.
Recommendations

- Create a more specific criteria to see if patients are appropriate for admission to the ROU.
- Increase communication between the ROU staff and the rest of the hospital.
- Look further into the delays that are hospital-related.
- Continue to find reasons for delay for a larger study.

References (cont.)


Special Thanks

• My mentors, Theresa Lattner and Russell Ringwall
• Rapid Observation Unit Team
• Office of Government and Community Relations’ Civic Education Department
• My peer mentor Imanni Williams and my intern group