Creating and Sustaining a Medical Learner-Nurse Rotation

Serena P. Kelly MS, CPNP-AC, Shinpei Shibata MD, & Laura M. Ibsen MD
Department of Pediatrics, Division of Critical Care

Background
- Everyday medical errors harm patients leading to increased morbidity or death.
- 44,000 people, possibly up to 98,000 people die in hospitals year after year as a result of preventable medical errors.
- New studies suggest $210,000 - 400,000 of premature deaths per year may be associated with preventable harm.
- We created a resident PICU Nurse Rotation (PNR) to begin bridging the divide between physician and nursing professionals.
- Expanding to medical students starting May 2017.

Goals
- Enhance interdisciplinary communication between physicians and PICU nurses providing an authentic interprofessional experience which would enhance the delivery of safe, effective care.

Learner Objectives
- Understand PICU nurse roles and responsibilities
- Improve communication skills with families
- Understand the impact of the nurse on the patient care experience
- Active collaboration in the care of the patient
- Learn nursing procedures and gain familiarity with medical equipment

Methods
- We created a month-long resident PNR where the nurses precepted the resident and the resident functioned as a nursing student.
- Three 12-hour shifts per week at the bedside with an RN
- Residents interested in pursuing hospital-based pediatrics tended to participate in the PICU Nurse elective
- This experience was rigorously evaluated and positively regarded (Table 1)
- A shorter PNR was created for all 2nd year pediatric residents who rotate through the PICU

Evaluation by Residents
- Average experience evaluation by Pediatric Residents, July 2007-June 2008 (Table 1)
- All responses out of 17 participants.

<table>
<thead>
<tr>
<th>Question</th>
<th>Mean</th>
<th>Median</th>
<th>StDev</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you feel the PICU resident nursing experience improved your understanding of the nursing role in patient care?</td>
<td>4.66</td>
<td>4.00</td>
<td>0.84</td>
</tr>
<tr>
<td>Do you feel the PICU resident nursing experience improved your understanding of the PICU role in patient care?</td>
<td>4.08</td>
<td>4.00</td>
<td>0.56</td>
</tr>
<tr>
<td>Do you feel the PICU resident nursing experience improved your ability to effectively communicate necessities and orders with the medical student?</td>
<td>4.23</td>
<td>4.00</td>
<td>0.73</td>
</tr>
<tr>
<td>Do you feel the PICU resident nursing experience improved your understanding of the overlapping areas of responsibility between doctors and nurses in patient care?</td>
<td>3.31</td>
<td>3.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Do you feel the PICU resident nursing experience improved your ability to effectively communicate necessities and orders with the medical student?</td>
<td>4.23</td>
<td>4.00</td>
<td>0.81</td>
</tr>
</tbody>
</table>

Learner Quotes
- “All the nurses were really welcoming and patient with me. Definitely felt they were used to having learners with them.”
- “It made me realize how many independent decisions nurses are responsible for and how much judgment they must use in the PICU.”
- “It provided me with insight into how long it can take perform multiple orders and try to prioritize them in order of importance.”
- “You realize how much the families depend on the nurses for information.”
- “Participating in and observing the care (cleaning, turning, comfort) routines helped me feel like we (institutionally) were caring for the patients more completely.”
- “I learned the importance of teamwork, interprofessional communication, and attitude.”
- “ICU nursing is one of the greatest untapped resources for resident medical education.”

Medical Learner Precepted Responsibilities
- Carry out interventions to support the high acuity patient - Titration of vasoactive, analgesia, sedative infusions - Early mobilization
- Minimize risks posed with invasive lines/devices - CAUTI, CLABSS, VAP prevention
- Serve as a patient and family advocate in rounds and care conferences
- Partner with the family to ensure patient-centered care - Care plans, continued communication with families on status, cares, and interventions.
- Collaborate with interdisciplinary teams to ensure comprehensive care - Physical therapy, occupational therapy, respiratory therapy, nutrition, pharmacy, subspecialty teams
- Minimize risks posed to the high acuity patient in relation to illness and disease process - Maintain skin integrity, hygiene, comfort, restorative measures, and health promotion

Impact
- Increase the medical teams’ understanding of the nursing role.
- PNR positively impacted the relationships and communication between the nursing staff and the Pediatric Residents

Current Implementation
- Create an experience for medical students through a Medical Student PNR.
- Learner objectives incorporate 4 SOM competencies (PC22, IC51, IC56, and SBP 5).
- Students progress in achieving desired competencies will be evaluated by bedside nurse preceptors.
- Students will complete a questionnaire and nurse preceptors will evaluate students’ ability to communicate and collaborate.
- Continue an authentic, clinically based interprofessional experience for residents
- Expect a similar positive effect on the relationship between the nurses and the medical students

Acknowledgements
- PICU Nurse Preceptors
- Resident participants

References