Innovation NK6EO

Two examples are required; **(one example must be from ambulatory care setting, if applicable):**

a. Provide two examples, with supporting evidence, of an improved outcome in a care setting associated with a clinical nurse(s) involvement in the adoption of technology.
   - Outcome data must be submitted in the form of a graph with a data table.

Please provide:

• Alignment of the time frames in the narrative and the improvements (outcomes) displayed on the graph.

NOTE: “February 2018” is described as part of the intervention period; the graph displays March 2018 as the first month of intervention.

**Time frames aligned in narrative and graph. Changes highlighted.**

**Example a: Implementation of Technology to Improve Post-Partum Patients’ Understanding of Medications**

**Problem**
Post-partum patients on the 4C Mother/Baby unit did not have a full understanding of their medications, as demonstrated by their HCAHPS scores in the Medication domain: “Overall, “How often did staff explain about medicines before giving them to patients,” “How often did hospital staff tell you what medicines were for” and “How often did hospital staff describe possible side effects in a way you could understand.” In January 2018, the 4C Mother/Baby nursing management team of Nurse Manager Beth Wilson, MSN, RN, NE-BC and Clinical Supervisor/Educator Theresa Owens, BSN, RNC-OB determined that this was an issue.

In February 2018, the Patient and Family Experience Committee determined that the use of the “Happening Soon” activity within the MyChart Bedside application would begin with the 4C Mother/Baby unit. This unit was selected because medication education is important for every post-partum patient, and because Women’s Services has a very high return on patient satisfaction surveys which would help in determining the impact of this new technology. The Bedside application in Epic provides transparency of scheduled and PRN medications for the patient by giving them access to their medical record in real time. The patient can use the iPad to review the name of the medication, read educational information, view previously administered medications and see when the next dose is due. Providing this tool to patients can improve their understanding of how the physician intends for them to receive the medications. The patient therefore no longer wonders when they will receive their pain medication, questions what medication was prescribed or needs to try to remember when they received their last pain medication. With Bedside, all this information is at the patient’s fingertips and equips them with the knowledge to more efficiently communicate and collaborate with their nurse regarding, for example, their pain management schedule.
In February 2018, Mother/Baby had an HCAPHS score of 44.5 “always” responses for the questions, “Before giving you any new medications, how often did hospital staff tell you what the medicine was for?” and “Before giving you any new medications, how often did hospital staff describe side effects in a way you could understand?” (The score is the percentage of patients surveyed who rate the explanation of medications and their side effects as “always” during their hospital stay.) The score is calculated as an average of the two questions, calculated as the number of patients who respond “always” to the question divided by the number of patients surveyed from 4C Mother/Baby.

**Goal Statement**
The goal was to improve WakeMed 4C Mother/Baby’s HCAHPS score for the questions, “Before giving you any new medications, how often did hospital staff tell you what the medicine was for?” and “Before giving you any new medications, how often did hospital staff describe side effects in a way you could understand?”

**Participants**

<table>
<thead>
<tr>
<th>Name/Credentials</th>
<th>Discipline</th>
<th>Title/Role</th>
<th>Department</th>
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<tbody>
<tr>
<td>Beth Wilson, MSN, RN, NE-BC</td>
<td>Nursing</td>
<td>Nurse Manager</td>
<td>4C Mother/Baby</td>
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<tr>
<td>Theresa Owens, BSN, RN, RC-OB</td>
<td>Nursing</td>
<td>Supervisor/Educator</td>
<td>4C Mother/Baby</td>
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<tr>
<td>Elizabeth Benton, BSN, RN-MNN</td>
<td>Nursing</td>
<td>Clinical Nurse</td>
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<td>Elaine Lee, BSN, RN, RN-BC</td>
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<td>Elisa Castro, BSN, RN, RN-MNN</td>
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<td>Audria Melton, RN</td>
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<td>Samantha Pyper, BSN, RN, RN-MNN</td>
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<tr>
<td>Deborah McAllister, RN, IBCLC</td>
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<td>Clinical Nurse</td>
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<tr>
<td>Noel Hammond, BSN, RNC</td>
<td>Informatics</td>
<td>Clinical Informatics Specialist</td>
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<td>Paula Carter-Scott, BSN, RN</td>
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<tr>
<td>Chad Sickle, BSN, RN</td>
<td>Informatics</td>
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**Description of Intervention**

*March 2018*
When an organization-wide interprofessional group looked at multiple educational systems in which patient education is delivered through the television, they found a system for delivering education through iPads, using a system that WakeMed Health & Hospitals already had in place. Clinical Informatics team members Noel Hammond, BSN, RNC, Clinical Informatics Specialist; Paula Carter-Scott, BSN, RN, Clinical Informatics Specialist; and Chad Sickle, BSN, RN, Clinical Systems Analyst II, met with the 4C Mother/Baby nursing management team of Wilson and Owen to discuss the blueprint of a successful implementation of the iPad with education plan.

- Hammond reviewed the MyChart Bedside Go-Live Checklist and instructed the leadership team to recruit superusers from all shifts to support the 4C Mother/Baby clinical nurses on go-live day and going forward.
- Members of the MyChart Bedside Task Force, including clinical nurses, looked at the way in which information flowed to the iPad and provided feedback to the IT team regarding views that would work better for the staff and patients.

April-May 2018

- Clinical nurse superusers were identified:
  - Elizabeth Benton, BSN, RN-MNN
  - Elaine Lee, BSN, RN, RN-BC
  - Elisa Castro, BSN, RN, RN-MNN
  - Audria Melton, RN
  - Samantha Pyper, BSN, RN, RN-MNN
  - Deborah McAllister, RN, IBCLC
- The superuser group met with the Clinical Informatics team of Hammond, Carter-Scott and Sickle to train with the new iPads.
- This training included an innovative approach in which each superuser had a Bedside iPad to role play a nurse and patient in case scenarios.
- Through the role-playing activities, superusers obtained information on medications, diagnosis and activities, from the patient view.
- A staff education video was created by the MyChart Bedside Task Force and assigned to all clinical nurses on 4C Mother/Baby.
- A review of the Bedside Tip Sheets and policy was included in the staff education.
- Clinical nurse superusers asked that the InDemand interpretive services app be placed on the iPads. Sickle received this request and showed the app to Terri Veneziale, Executive Director of Patient, Family & Employee Experience, who sponsored the InDemand interpretive services app on the iPads.
- Sickle contacted InDemand to work out the technical difficulties and test the application.
- A week later, the functioning interpreter app was on the iPad and then deployed to all iPads in the system.
- 4C Mother/Baby clinical nurses were excited to review patient medications on the Bedside app, as it provides a Skype-like experience for the patient and nurse at the bedside with the push of a button.

June 2018
The rollout of the iPads started on June 15, 2018.
The 4C Mother/Baby clinical nurses received at the elbow support during staff huddles, unit in-services and one-on-one training at the bedside during the implementation period.
The MyChart Bedside Task Force emphasized the importance of activating the iPads for patients and reviewed the location of tips sheets and other resources during unit huddle.
Superusers were involved in this education and support by covering the off shifts and weekends.
Staff members could access the bedside resource book that was placed at the main nursing station.
Leadership also had electronic copies of the resource information to disseminate to staff members.
Clinical nurse superusers provided support to the rest of the nursing team in learning how to use the new iPads.
Clinical nurse superusers suggested putting the post-partum depression screening tool on this new technology to help screen new mothers for post-partum depression. As a result of their suggestion, the screening flows directly into Epic, eliminating the need for the clinical nurse to take an additional step to transcribe the information into Epic.

Outcomes
The goal was achieved as a result of clinical nurses’ involvement in adopting iPads into their daily practice of reviewing medications with their patients. The HCAHPS scores for the questions, “Before giving you any new medications, how often did hospital staff tell you what the medicine was for?” and “Before giving you any new medications, how often did hospital staff describe side effects in a way you could understand?” improved from the February 2018 baseline score of 44.5% “always” responses to:

- 73.07% “always” in July 2018
- 77.83% “always” in August 2018
- 70.69% “always” in September 2018
Evidence NK6EOa-1, 4C Mother/Baby Raleigh Campus HCAHPS Score for Explanation of New Medications and Side Effects of New Medications