Innovation NK7EO

Two examples are required; one example must be from ambulatory setting, if applicable

a. Provide one example, with supporting evidence, of an improved outcome associated with nurse involvement with the design or redesign of work environment.
   - Outcome data must be submitted in the form of a graph with a data table.

AND

b. Provide one example, with supporting evidence, of an improved outcome associated with, clinical nurse involvement with the design or redesign of work flow in an ambulatory setting.
   - Outcome data must be submitted in the form of a graph with a data table.

Example b: Decreasing the Percentage of WPP Pediatric Primary Care Asthma Patients Visiting CED/EDs for Non-urgent Asthma Care

Problem
Poor asthma management by pediatric patients and the subsequent overutilization of the Children’s Emergency Department (CED) and all WakeMed EDs for non-urgent care needs is a common problem. Non-urgent care needs include filling maintenance medication prescriptions, receiving a breathing treatment and then being discharged home, or receiving care for a cough or wheezing symptom. Pediatric asthma patients from WakeMed Physician Practice (WPP) Pediatric Primary Care were seeking care in the CED/EDs for non-urgent treatment. In 1st Quarter FY 2018 (October-December 2017), of the WPP Pediatric Primary Care pediatric asthma patients who sought treatment in WakeMed EDs 86% of those patients were classified as non-urgent. This percentage is the total number of WPP Primary Care pediatric asthma patients who present to the WakeMed EDs as non-urgent (triage classification 3, 4 or 5) divided by the total number of WPP Primary Care pediatric patients seen in WakeMed EDs.

Goal Statement
The goal was to decrease the percentage of WPP Pediatric Primary Care asthma patients visiting CED/EDs for non-urgent asthma care.

Participants

<table>
<thead>
<tr>
<th>Name/Credentials</th>
<th>Discipline</th>
<th>Title/Role</th>
<th>Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michele Florence, BSN, RN, AE-C</td>
<td>Nursing</td>
<td>Clinical Education Specialist</td>
<td>WPP Pediatric Primary Care</td>
</tr>
<tr>
<td>Nicole Griffin, RN, RN-</td>
<td>Nursing</td>
<td>Lead Ambulatory</td>
<td>WPP Pediatric Primary Care</td>
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</tbody>
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Description of the Interventions

**January 2018**
- Clinical Nurse Michele Florence, BSN, RN, AE-C, Clinical Education Specialist, Asthma Educator, used a report to evaluate the number of WPP pediatric patients seeking CED care for asthma-related problems, such as cough, wheezing or asthma attack, that could easily be treated at home or during a routine office visit.
- An issue that Florence noted was insufficient time to address patients and families' educational needs and provide detailed asthma education and support. Each pediatric asthmatic was scheduled for a 20-minute return visit with the provider and Florence, whose case load varied from zero to 16 patients per day. Another issue in scheduling was having three pediatric asthma patients scheduled to arrive at the same time for their follow-up visit.
- Florence identified an opportunity to initiate a standard process for scheduling dedicated asthma education.
- Florence discussed the need for a separate asthma schedule with Donna Avery, WPP Pediatric Primary Care Practice Manager.
- The WPP Pediatrics Quality Committee met to discuss the benefits and drawbacks of a designated asthma schedule and to consider performing a Plan Do Study Act (PDSA) for a workflow redesign.
- Florence reviewed data to identify the average number of pediatric asthma patients seen weekly to determine number of daily visits needed. Florence found through her data review that an average of six asthma patients were seen per day in the winter months and five were seen per day in the summer months.
- The WPP Pediatric Quality Committee met to finalize the details of the asthma PDSA and new asthma provider schedule.
- Asthma patient office visits paired the Asthma Educator, Florence, and the providers as identified by Elizabeth Cleland Roberts, MD, to establish six daily visit times spaced throughout the day. This allowed up to 90 minutes per visit if needed to increase the amount of education time with the patients and families.

**February 2018**
- Avery built the new asthma provider schedule in the system.

**March 2018**
- The new asthma provider schedule was rolled out to the asthma patients and providers.
• Florence called existing pediatric asthma patients to reschedule on the new template.
• These appointments were scheduled only by Florence or the WPP Peds Triage RN. The call center staff had at times been scheduling asthma well visits with a new provider in the same appointment time slot as asthma sick calls or requests for refills of asthma medications.
• To prevent scheduling errors, the call center staff is no longer involved in scheduling asthma appointments.
• Florence assumed full management of the pediatric asthma patient scheduling and office visit from check in to check out. Pediatric asthma patients are no longer seen by medical residents, but only by attending physicians. Florence schedules return appointments at the completion of each visit, with the goal of scheduling the patient with the same provider pairing at each subsequent visit. This new workflow helps to ensure enough time is spent with each patient/family and to provide consistent time for education to reduce the need for these patients to present to the CED unnecessarily for non-urgent asthma care.

Outcomes
Clinical nurse involvement in redesigning the workflow for pediatric asthma patients in WPP Pediatric Primary Care led to a decrease in the percentage of WPP pediatric asthma patients who sought CED/ED care for non-urgent asthma care, from 86% in 1st Quarter FY 2018 (October-December 2017) to:
• 66% in 3rd Quarter FY 2018 (April-June 2018)
• 0% in 4th Quarter FY 2018 (July-September 2018)
• 50% in 1st Quarter FY 2019 (October-December 2018)
Evidence NK7EOb-1, WPP Pediatric Primary Care; % WPP Pediatric Primary Care Pediatric Asthma Patients that are seen in WakeMed EDs for Non-Urgent Asthma Care