Improving the Rate and Quality of Pre-Procedure Education for Patients by Standardizing the Nursing Approach

Amber Reps RN, Kari Owens RN, Marielle Gregoire RN, Jessica Hearn RN, Paula Murphy RN, Angela Majerus BA QI Coach, and James Boyum MD

Background

The 2015 Radiology Patient Satisfaction Survey indicated that the ultrasound (US) and computed tomography (CT) areas scored the lowest in education at 78% and 81% respectively. These results prompted the team to begin exploring opportunities for improvement.

The nursing team noticed that patients were arriving to their procedure appointment with minimal to no education resulting in patient cancellations and procedural delays.

- Highlighting a need for standard education
- The team noticed many different clinical areas schedule procedures, and each has a project charter and A3 document
- US patients who are likely to receive sedation
- US drain patients

Our team utilized the following tools during the define stage:

- Project Charter and A3 Document
- US patients who are likely to receive sedation
- US drain patients

- Education given before procedure: 15% of patients reported not receiving any education prior to their procedure
- Education given via phone call: 70% of patients reported they would like a phone call the day before the procedure
- Education pamphlet: 65% of patients indicated it would be beneficial to have educational pamphlets in the patient lobby

Motivation

The aim of this project was to ensure the following subset of patients would receive standardized education prior to their scheduled procedure:

- US organ biopsies patients who have not had a procedure in the last year
- US drain patients
- US patients who are likely to receive sedation
- All CT procedure patients

Our baseline data indicated that this patient subset needed the most education prior to procedure and had the highest cancellation rate due to the lack of education.

Project Kickoff: 05/15/2016

Our quality improvement coach provided education on DMAIC and tools utilized.

Our team utilized the following tools in the define stage:

- Project Charter and A3 Document

Define

Goal Statement

- Improve the rate of education given to first time patients prior to procedure from 85% to 100% by February 28, 2017, while maintaining a 6% or less delay/cancellation rate of procedures.

Measure

- Baseline Measurement:
  - Patient satisfaction gaps were identified using a baseline survey conducted from 9/12/2016 to 9/23/2016.
  - This survey included gaps in pre-procedural education (see Figure 1 and Survey 1).

- As 11 question survey was given to 20 patients who had had a previous procedure in the ED (see Survey 1).

- Patients given Yes/No answers to 11 questions with 3 questions asking for clarification if their answer was yes (see Survey 1).

- Procedures were cancelled or delayed due to improper medication use. This gap was confirmed by data collected from 10/13/2016 to 10/21/2016 (see Figure 2).

- A tally sheet was the method of data collection.

Analyze

- Overall, pre-procedural rate of education was 85%.

- Despite a successful rate of 85% of procedures receiving pre-procedural education, the nursing team desired a pre-procedural education rate of 100%.

- Themes identified:
  - Education given before procedure: 15% of patients reported not receiving any education prior to their procedure.
  - Education given via phone call: 70% of patients reported they would like a phone call the day before the procedure.
  - Education pamphlet: 65% of patients indicated it would be beneficial to have educational pamphlets in the patient lobby.

- 100% of patients received at least one method of pre-procedural education that was implemented.

- Education goes via phone call: 80% of patients reported receiving education prior to their procedure (see Figure 3).

- Education goes via phone call: 100% of patients perceived the phone call as beneficial (see procedure (see Figure 3).

- Education pamphlet: 25% of patients reported using the educational pamphlet in the patient lobby (see Figure 3).

- 5% of procedures were canceled due to lack of pre-procedure education (see Figure 4).

- 90% of patients reported having an increase in overall satisfaction due to increased education (see Figure 3).

Final Results

Figure 1

Patient Experience Survey

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Figure 2

Delays and Cancellations due to Improper Medication Use Prior to Procedure

- 85% of procedures were cancelled due to lack of pre-procedure education.

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Figure 3

Post Pre-Procedure Education Implementation Survey Results

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Figure 4

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Maintenance Plan

- Change nurses will continue to stock education pamphlets in the patient lobby.

- Change nurses will continue conducting pre-procedure education phone calls.

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- Standardized education was provided to relevant ordering services by RNs in the nurse residency program.

- Revise patient satisfaction and delay/cancellation rate due to improvement in medication use.

Lessons Learned

- The A3 tool was beneficial in visually managing our project.

- Communication to all stakeholders is key when trying to implement improvements.

- Even though education was provided to ordering services, our post-data indicate <100% of the time patients are receiving the pre-procedure education by the ordering service.

Opportunities for Growth

- Future work for improvement could be:
  - Mandatory documentation of pre-procedure education provided by the ordering services to ensure that we are educating 100% of patients.
  - When a procedure is scheduled, an additional appointment could be created with a procedure name for pre-procedure education.
  - When resources allow, create the ability to leave a message for a patient to return our pre-procedure education phone call.
  - If data indicates a need for improvement, these pre-procedure education phone calls could be replicated in other radiology units.

- Expanding procedure nurses role by properly training them to complete pre-procedure education phone calls allowing RNs to focus on other clinical responsibilities.