

Improving Patient Safety By Standardizing Radiology Pre-Procedural Time-Out

RSNA 2016

Pratik Rachh, MD, MBA
Deborah G Walls, DNP, NP
Susan Reich, BS, LSSG
Edwin Herrod, RT (R) (VI)
Janice Newsome, MD
C. Matt Hawkins, MD



Department of Radiology and Imaging Sciences
Emory School of Medicine and Emory Healthcare



EMORY
UNIVERSITY
SCHOOL OF
MEDICINE

Disclosures

The authors have no disclosures

Background

- **Wide variation in the Pre-Procedural Time-Out (PTO) and patient identification process for procedures performed at Emory Radiology**
- **Variations include:**
 - Patient identification methods
 - Site-marking processes
 - Personnel present during PTO
 - Defined roles of technologists, nurses, and physician or Advanced Practice Provider (APP) proceduralists during the PTO process

Purpose

- **Develop a standardized process for patient identification and pre-procedure time out**
- **Prevent wrong procedure, wrong site and wrong patient errors for radiology procedures across the system**
- **Ensure patient safety is a part of our culture**
- **Providers encounter the same time out process regardless of the facility they are working at**

Aim Statement

Develop and implement a standardized patient identification and pre-procedure time out process which is followed 100% of the time for procedures performed in radiology by January 2016

Baseline Observations

CTO Element	Performed	Not Performed
Staff introductions	2	11
Safety precautions specified	5	8
Agreement to proceed	9	4
Confirmation of order & consent	12	1
Images and name displayed on monitor	2	11

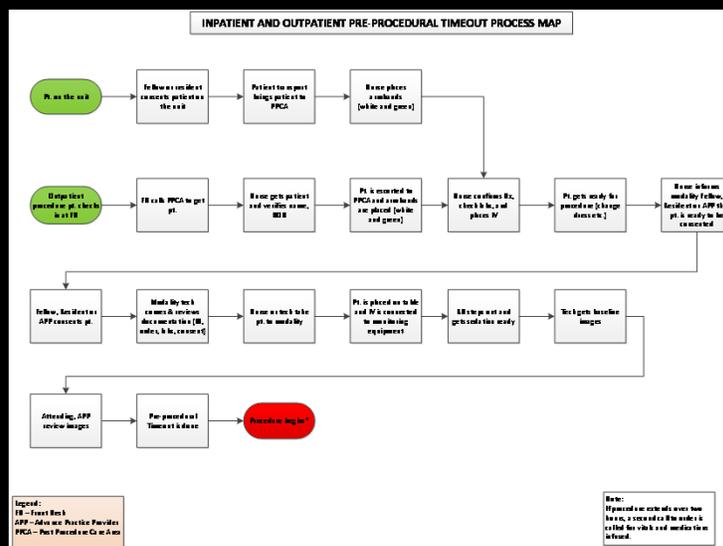
Direct observations of 13 Time-out events on 2 separate days in 3 modalities showed that none met the stipulated standards.

Culture of Safety Survey

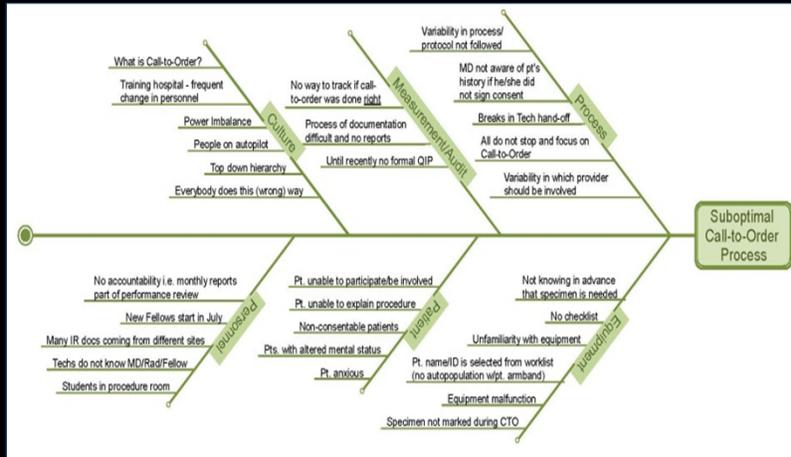
- Prior to initiation of the project, faculty and staff perception of safety was assessed with a survey modeled after AHRQ Culture of Safety Survey
- Results showed a significant percentage of respondents (~40%) reported they often work in crisis mode and it's just by chance more serious mistakes don't happen

Surveys on Patient Safety Culture. Agency for Healthcare Research and Quality, Rockville, MD. <http://www.ahrq.gov/professionals/quality-patient-safety/patientsafetyculture/index.html>

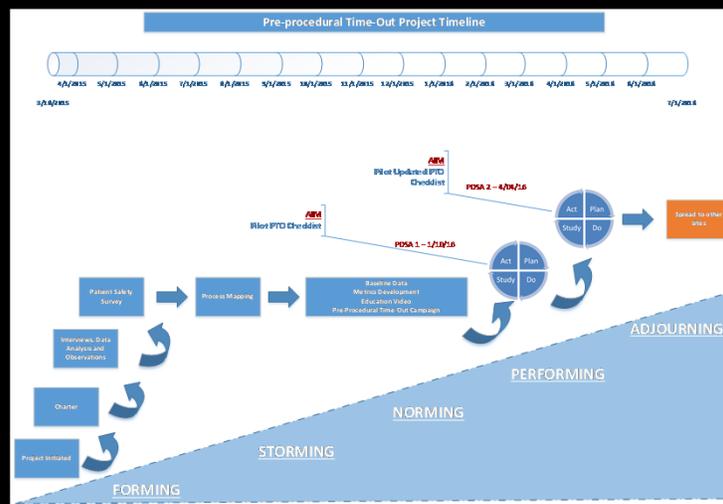
Current State Process Map



Cause and Effect Analysis



Project Timeline



Awareness Campaign



Campaign Poster

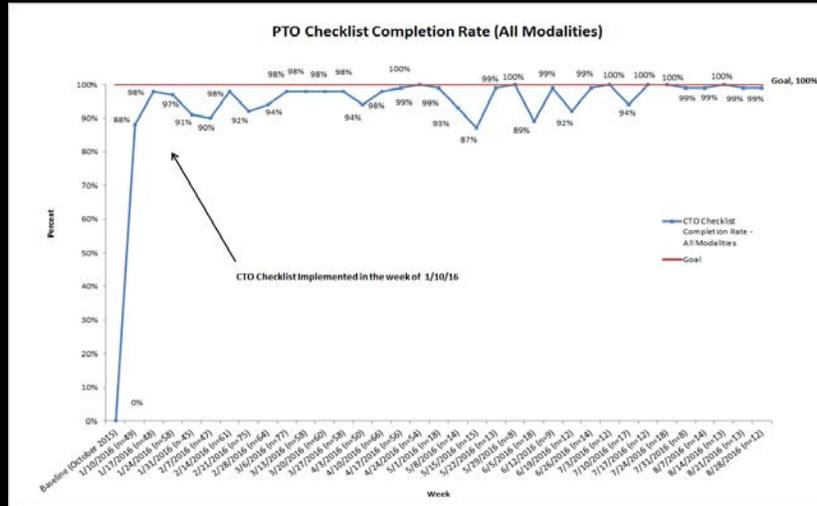


Buttons

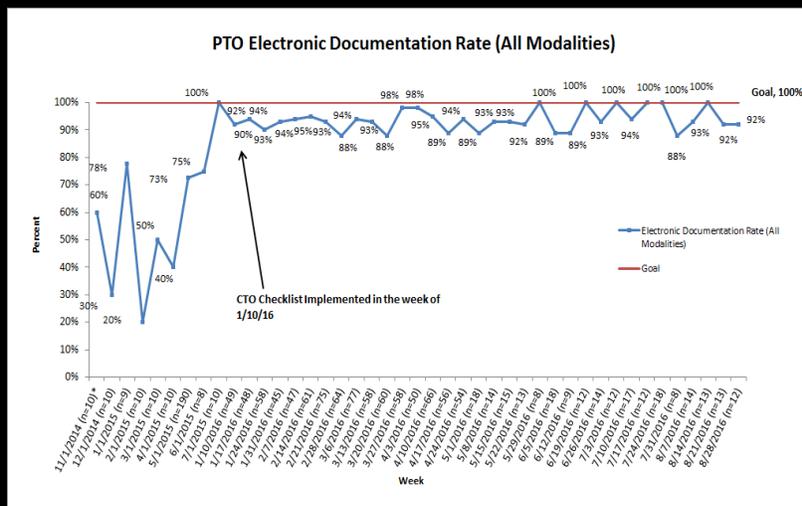
Staff Training Videos



Metrics



Metrics



Post-Implementation Results

- **Average rate of completion of all elements of the checklist (n=1168) across three modalities (Interventional Radiology, Computer Tomography and Ultrasound) is 96%**
- **Silent observer observations indicate that 80% to 100% of procedures met the new standards**
- **Average rate of documentation in electronic medical record (n=1168) has been 94% since implementation**

Conclusions

- **Emphasis on creating a safe environment for our patients led to the identification of wide variations in PTO practice**
- **Workflow process and culture change require focused, multidisciplinary teamwork actively supported by executive leadership**

Conclusions

- Currently, the new standardized PTO process is completed >90% of the time
- Next steps include sustaining gains, integrating PTO training into new staff onboarding process, and spreading the new process at the remaining four institutions