

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

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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

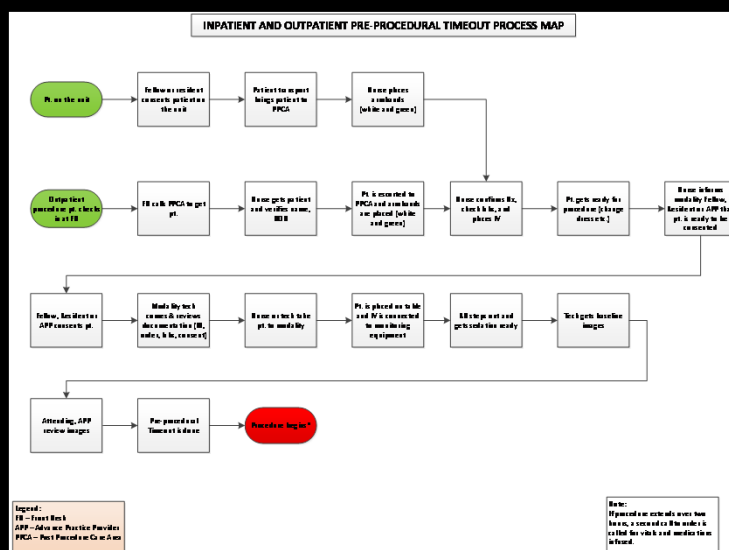
Direct observations of 13 Time-out events on 2 separate days in 3 modalities showed that none met the stipulated standards.

Culture of Safety Survey

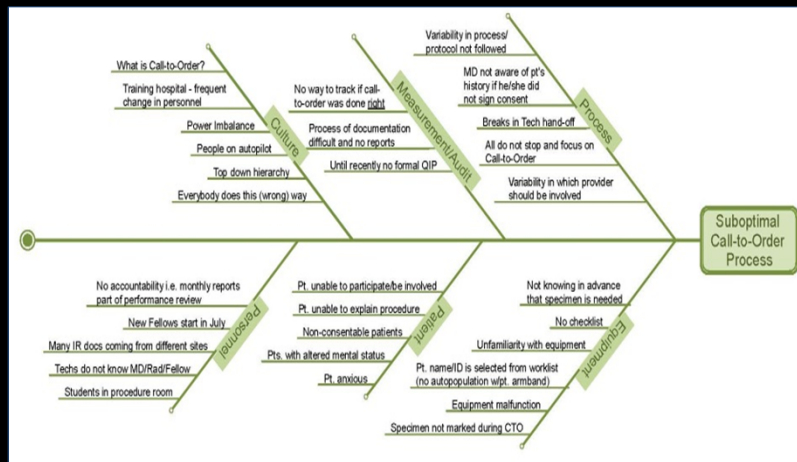
- Prior to initiation of the project, faculty and staff perception of safety was assessed with a survey modeled after AHRQ Culture of Safety Survey
- Results showed a significant percentage of respondents (~40%) reported they often work in crisis mode and it's just by chance more serious mistakes don't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

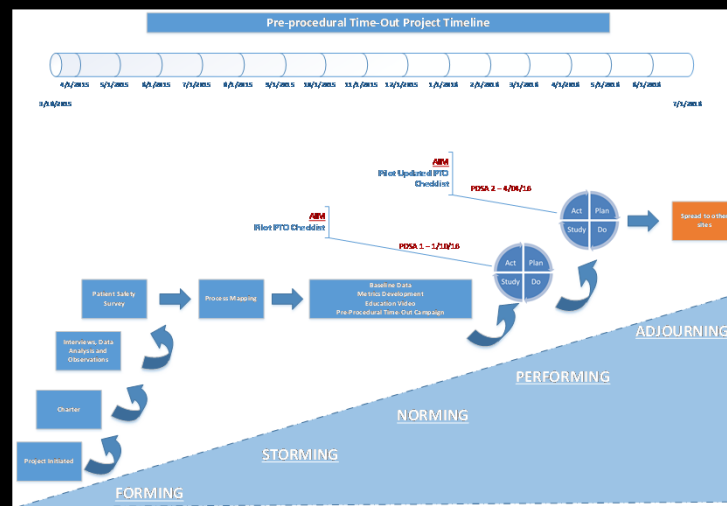
Current State Process Map



Cause and Effect Analysis



Project Timeline



- **Develop PTO checklist and a standardized process for its use**
- **Interdisciplinary PTO team training and empowerment to speak up for patient safety**
- **Emphasis on organization's "Pledge" to ensure Safe and Just Culture**
- **Pre-procedural time-out awareness campaign**
- **Development of metrics and sharing of performance at monthly team meetings**

Safety Checklist

EMORY HEALTHCARE		RADIOLOGY PROCEDURE SAFETY CHECKLIST	
P1. PRE-PROCEDURE VERIFICATION PROCESS 1. Verify patient identity 2. Verify patient location 3. Verify patient history 4. Verify patient consent 5. Verify patient allergies 6. Verify patient insurance 7. Verify patient insurance 8. Verify patient insurance 9. Verify patient insurance 10. Verify patient insurance	B. BEFORE PATIENT LEAVES PCA 1. Confirm all monitors have functional thresholds 2. Time Out/Call to Order: Led by the Procedureist 3. Confirm call to order 4. Is everything focused on patient? 5. Infection control if they are able 6. Confirm 2 person monitors on patient 7. AHA, Fall Name, CUE 8. Remove patient if they are 9. Is everything 10. Confirm name and location 11. Confirm name and location 12. Patient returned to the unit? 13. All equipment and medications available? 14. Is everything in agreement? 15. Is electronic documentation complete?	I. IN PROCEDURE ROOM 1. Daily medical personnel 2. Confirm all monitors have functional thresholds 3. Time Out/Call to Order: Led by the Procedureist 4. Confirm call to order 5. Is everything focused on patient? 6. Infection control if they are able 7. Confirm 2 person monitors on patient 8. AHA, Fall Name, CUE 9. Remove patient if they are 10. Is everything 11. Confirm name and location 12. Confirm name and location 13. Patient returned to the unit? 14. All equipment and medications available? 15. Is everything in agreement? 16. Is electronic documentation complete?	DO NOT RE-ENTER ROOM
PCA Training Template 1. Verify patient identity 2. Verify patient location 3. Verify patient history 4. Verify patient consent 5. Verify patient allergies 6. Verify patient insurance 7. Verify patient insurance 8. Verify patient insurance 9. Verify patient insurance 10. Verify patient insurance	PROCEDURE ROOM TRAINING TEMPLATE 1. Verify patient identity 2. Verify patient location 3. Verify patient history 4. Verify patient consent 5. Verify patient allergies 6. Verify patient insurance 7. Verify patient insurance 8. Verify patient insurance 9. Verify patient insurance 10. Verify patient insurance		
Date of Procedure: Time of Procedure: Primary Procedureist: Attending: Expected length of time:	THIS SEVER: CONFIDENTIAL - Important communications for quality improvement. 		
Patient Status:			

- ☐ Rally involved personnel
- ☐ Confirm all members have introduced themselves
- Time Out/Call-to-Order: Led by the Proceduralist**
- ☐ Announce Call-to-Order
- ☐ Is everyone focused on event?
- ☐ Involve patient if they are able
- ☐ Confirm 2 patient identifiers on WHITE armband (MRN, Full Name, DOB)
- ☐ Review consent and order
- ☐ Any allergies?
- ☐ Correct name on monitor/labels?
- ☐ Is correct side and site marked?
- ☐ Is patient secured to the table?
- ☐ All equipment and medications available?
- ☐ Any special safety precautions (i.e. labs...)?
- ☐ Is everyone in agreement?
- ☐ Is electronic documentation complete?

Awareness Campaign



Campaign Poster

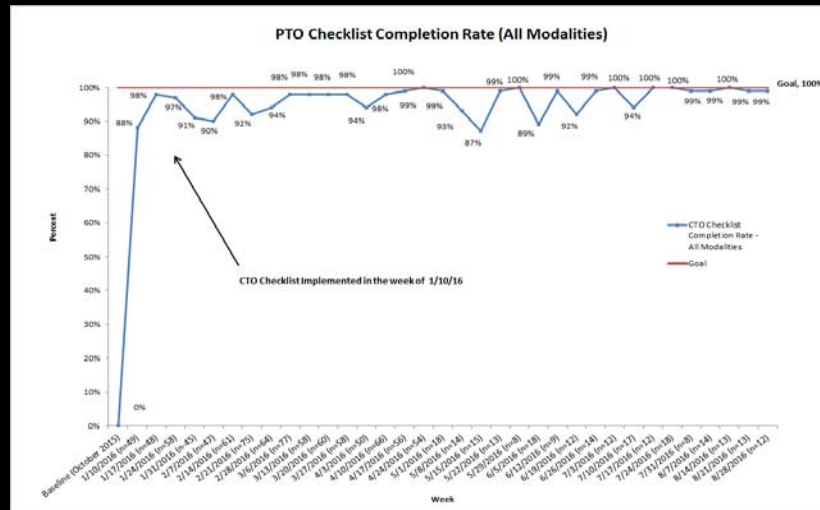


Buttons

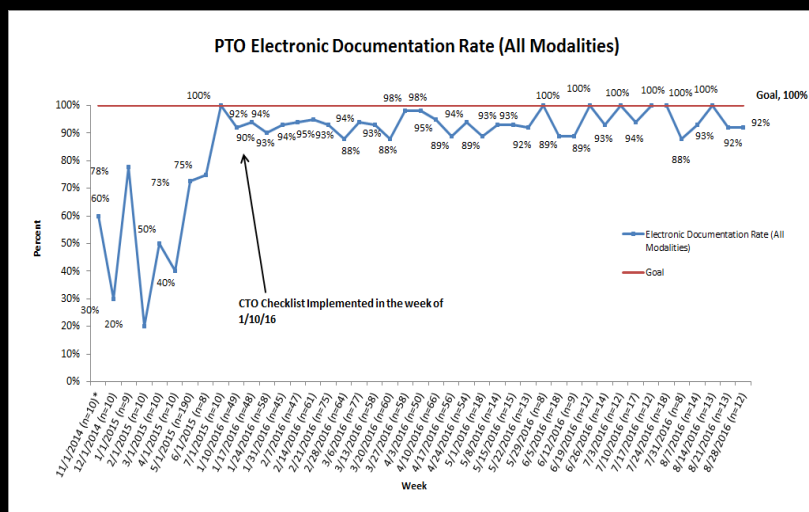
Staff Training Videos



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