TAVR WORKFLOW IMPROVEMENT

Keith Tottenham BS, RN

BIDMC Cardiac Catheterization Laboratory

Introduction/Problem

IDENTIFIED WORKFLOW PROBLEMS

- OR staffing limitations prompted an evaluation of TAVR staffing patterns
  - Analysis of national trends demonstrated other centers moving toward cardiac catheterization lab only staffing
- Lack of clear role definitions in procedures
  - Leads to underutilized staff and nonproductive work
- Cumbersome PACU/ICU transition
  - No formal handoff process resulting in communication gaps
  - RN and anesthesia both attempting to report off simultaneously, delaying next case start

Aim

The goal is to standardize work roles, eliminate redundant staff and streamline the transition of patients in and out of the procedure room

The Team

- Keith Tottenham BS,RN
- Kim Guibone RN, MSN, ANCP
- Sue Pobywajlo RN, MPH
- Lana Gavin RN, MS
- Mary Grzybinski RN,MSN
- LeeAnn Allsop BSN,RN
- Luis Duffy CVT RCIS
- Chris Mercurio BS, RT, RCIS
- Oscar Medina RT
- Lisa Hird RN, MSN

The Interventions

- Identified necessary tasks of the procedure
- Worked to establish collegial support from cardiology, surgery, and administration
- Developed written role descriptions with assigned critical tasks
- Perform “mock procedures” and encourage staff feedback to optimize role development
- OR staff identified critical points for OR conversion
- PACU established handoff template
- Updated electronic documentation template

Results/Progress to Date

OLD STAFFING PATTERN	NEW STAFFING PATTERN
1 Cath Lab nurse	2 Cath Lab nurses
2 Cath Lab CVT/RT	2 Cath Lab CVT/RT
1 OR circulator nurse	
1 OR scrub nurse	

PROCESS

- ✓Role script with specific task responsibilities
- ✓Combined checklist report sheet
- ✓Established “crash” list for OR conversion

For more information, contact:

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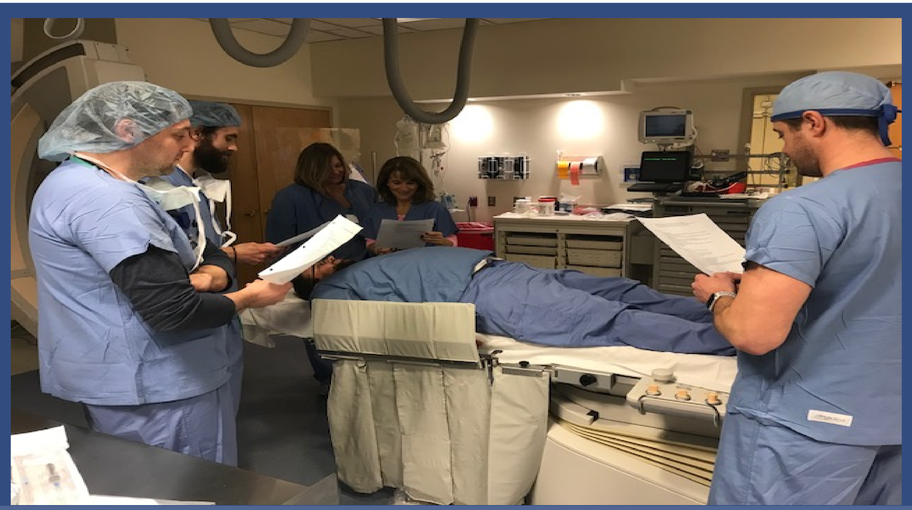
More Results/Progress to Date



Example of a “mock” procedure where staff practiced role responsibilities and provided feedback on adjustments or improvements

TAVR BY THE NUMBERS:

- 167- Number of TAVR procedures done in the past year[1]
- 348- Number of OR nursing hours redistributed by streamlining staffing and standardizing workflow[1]
- 49%- Percent reduction in the cost of length of stay (LOS) in FY ‘16[1]
- 75%- Percent of patients that now go to an inpatient unit rather than an ICU[1]

1 Figures courtesy of BIDMC Office of Decision Support

Workflow Improvement Outcomes

- Physician and Staff Satisfaction
- Improved Documentation
- Efficient Throughput
- Cost Reduction

Lessons Learned

- Buy in from clinical staff was imperative to the success of transition
- Implemented an OR conversion plan if patient became acutely unstable
- Real-time correction of documentation accuracy through auditing

Next Steps

- Identify and eliminate barriers to room turnover
- Increase annual procedure volume
- Develop process for transitioning to moderate sedation

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