

Procedure room utilization: A nurse-led improvement project in a US hospital-based endoscopy unit



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Introduction and Purpose

Hospital based endoscopy units are complex and expensive; effective procedure room utilization is essential for hospital financial health. At one academic medical center inpatient procedure room utilization was 34% below national benchmarks.

Multiple inefficiencies contribute to low procedure room utilization, the purpose of this nurse-led Quality Improvement (QI) project was to determine if an endoscopy nursing pre-procedure checklist would improve three outcomes in a hospital-based endoscopy unit.

Aims

AIM #1: Determine if this endoscopy nurse-led intervention can increase the number of minutes utilized in inpatient procedure room.

AIM#2: Determine if this nurse-led intervention can reduce the percentage of safety events reported in the inpatient procedure room from pre-intervention baseline.

AIM#3 Determine if this endoscopy nurse-led quality improvement project can increase scores for nurse satisfaction from pre-intervention baseline.

Methods

Design: Pre-test post-test design with two data sources, inpatient procedural cases, staff nurses.

Setting: hospital based endoscopy unit in one U.S academic medical center

Sample Inpatient cases (n=480) staff nurses (n=32)

Intervention: Nursing pre-procedure checklist

Data analysis: independent sample t-tests and chi-squared test.

Tools

Pre-Procedure Checklist & Nurse Satisfaction Survey

Results

- Procedure room utilization (minutes) increased post-intervention [Md]=28.76, [SE] =18.26 ; p=0.12).
- Cases completed increased (Md=1.34, SE =0.39; p<0.05).
- No significant association was found between patient safety events (p=0.19) or staff satisfaction (p=.78) compared pre and post-intervention.
- Staff satisfaction post test summary scores increased: Pre Intervention Mean (S.D) 18.85 (3.94) Post Intervention Mean (S.D) 18.90 (4.17)

Discussion

Reducing inefficiencies in endoscopy workflow increased procedure cases and minutes. Despite limitations, study has clinical significance and relevance for nursing practice. Checklists, widely used in healthcare settings, are a viable intervention in a complex hospital based endoscopy unit. Findings have implications for nursing leaders, project highlights the role of nursing in clinical operations and adds to the body of evidence that nurse-led QI projects are effective in a variety of practice settings.

Conclusion

- Hospitals are continuously examining ways to improve efficiencies to balance the high costs of procedural areas and increase patient access to care.
- Nurses play a critical role in hospital based endoscopy settings.
- Using a cost neutral QI tool, a nursing pre-procedure checklist, frontline endoscopy nurses improved procedure room utilization and increased staff satisfaction

AUTHORS HAVE NO CONFLICT OF INTEREST