



# The Ongoing Case for Preoperative Teaching & Stoma Site Marking in General Surgery Population



Katherine Zimmick RN, DNP, ACNS-BC, CWOCN & Meghan C. Smith MSN, AGACNP-BC, CWOCN

## Introduction

### Joint Position Statement: ASCRS, AUA, UOAA, WOCN

All patients scheduled for ostomy surgery should have stoma marking done preoperatively. This allows for determination of the optimal site, reduces postoperative problems, enhances patient independence in stoma care and resumption of normal activity.

### Joint Commission's National Patient Safety Goals

Surgical sites are marked when there is more than one possible location for the procedure and when performing the procedure in a different location would negatively affect quality or safety



## Supportive Evidence

- Problematic stomas are more likely to occur in those patients who are not preoperatively marked
- Preoperative teaching and marking has been shown to reduce postoperative length of stay, decrease the time to stoma proficiency, and reduce the number of ostomy supplies and home care visits
- Preoperative teaching is linked to an improvement in reported overall quality of life and a reduction in anxiety

## Background

- A previous retrospective chart review showed only 3 out of 21 Acute Care Surgery patients at large urban teaching hospital, who were admitted for a non-emergent condition, received preoperative teaching and stoma marking.
- A quality improvement project was implemented involving the training of staff RN's in preoperative stoma site marking and the development of a flowsheet resulted in a significant improvement in the numbers of patients receiving these interventions ( $p = .002$ )
- Two years later, follow up indicated a need for a re-evaluation of the original QI project

## Theoretical Model

### FOCUS-PDCA Model for Quality Improvement

#### FOCUS

Finding a process that needs improvement

Organization of a team

Clarifying and understanding the process and its variations.

Selecting the process improvement to be implemented & starting the PDCA cycle.

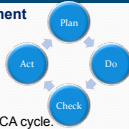
#### PDCA

**Planning:** data analysis, selection of interventions, development of tools and forms, and conducting necessary education or training.

**Doing:** Implementation of the plan

**Checking:** Ongoing assessment process

**Acting:** Standardized of the change through use of policies, protocols, and the embedding into the institution's existing quality improvement structure



## Methods

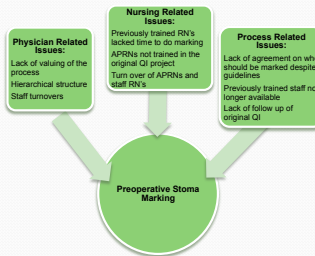
### Finding the Process

- Review of data from earlier retrospective chart review and QI project
- Review of previous algorithm for patient selection
- Discuss previous process with existing staff

### Organizing the Team

- Quality Improvement (QI) Team Members
  - Team Leaders (2)
  - WOC nursing team
  - Nurse Practitioners (9)
  - Nurse Associates (2)
- Ancillary Members
  - Physicians (1)

### Clarifying and Understanding the Process



### Selecting the Process

- Adaptation of original QI project
- Update education process
  - Involve acute care surgery nurse practitioners and nurse associates involved in direct care
  - Review algorithm with staff physician to achieve agreement on patient selection process

### Planning

To increase knowledge of how to obtain services, provide visual cues & increase trained staff

- Updated flow sheet
- Educational opportunities
  - Online learning module and quiz
  - Discussion of existing literature
  - Hands on training
- Check-off of stoma site marking and patient education

### Doing

Implementation over a 3 month time period

- Nine nurse practitioners and two nurse associates completed the educational program
- Check-offs ongoing
- The updated algorithm was distributed to ALL staff physicians and NP's, placed in the education binder and team office.
- Educational Binders were reviewed and placed in two accessible locations
- Educational materials in NP office

### Checking

- Bi-weekly chart reviews
- Continued check offs
- Reinforcement of education and flow sheet with APP and physician staff during daily rounds

### Acting

- Presentations at General surgery APP monthly staff meetings
- Surgical newsletter
- Poster for general surgery clinic
- Planned presentations to all surgical residents annually
- Health Stream module, annual check offs on skills

## Conclusions

### Results

- Early data shows improvement in the number of patients receiving appropriate preoperative teaching and stoma marking
  - Of 8 surgical cases with possible ostomy, 4 cases were scheduled (>24hours after admission) and 4 were emergent (OR case <24hours since admission)
  - 3 out of 4 patients with a scheduled case received pre-op teaching and marking.
  - Data collection is ongoing
- Improved relationship and collaboration of services between inpatient WOC nurses and acute care surgery team
- Increased referrals to outpatient WOC nurse

### Limitations and Challenges

Many issues affecting the long term success of the original QI project remain

- Communication patterns between the medical staff (senior staff and residents) and between medical staff and APRN's remains hierarchical
- Current scheduling patterns of APRN staff can result in fragmented, time limited care
- Lack of valuing by some APRN's resulted in some APRN's "opting out" of the process
- On-going evaluation of this EBP QI project remains "person" dependent and not incorporated into existing QI dashboard
- Stoma site marking remains a quality of life issue for patients, with limited reimbursement



## Implications for Practice

- The application Evidence Based Practice need not be limited to "high cost, high risk, high volume" patients and is possible for even small groups of patients within a larger health system
- This project emphasizes the cyclical nature of QI activities
- This project adds to the available data on the clinical management of this unique population and potential strategies to change provider behavior and improve patient outcomes
- Collaboration within a multidisciplinary team can result in process improvement and implementation of evidence based care

## References

- See provided handouts