

Brigham Surgical QUALity REDesign: Project Template

BSQUARED is a unique program designed to increase the involvement of surgeons and anesthesiologists at the sharp edge of care delivery in quality improvement efforts. Through enhanced collaboration with the BWH Department of Quality and Safety, multidisciplinary provider-led teams will develop and implement projects that transform front-line clinical expertise into hospital-level improvements in surgical quality and patient safety.

Please use this template as a guide for assembling your project team and designing your quality improvement initiative. Sections 1 and 2 alone are sufficient for initial consideration; Sections 3 and 4 can be completed after preliminary review with input from the BSQUARED Team. The submission process is a collaborative effort; details and deadlines can be found [here](#).

1. Submitter and Stakeholder Information

Submitter name: Dr. Foley
Title: Decreasing Foley Catheter Use in the OR
Department: General Surgery
Email address:
RemoveFoley@PreventCAUTI.com

Primary clinical champion (if different from above): Dr. Foley

Sponsor(s) (division chief/departments chair or above): Dr. Prevention, Chief of Surgery

Stakeholders (any and all parties affected):
Surgical Patients, OR Staff (Drs, PAs, RNs, Techs)

Team members (please include title and department):
Dr. Foley-Resident, General Surgery; Dr. Catheter-Attending General Surgery, PA Infection-PA, General Surgery, Nurse Void-RN OR

Project teams' anticipated weekly time commitment: 5 hours/week

2. Evidence-Based Clinical Information

Problem statement (What problem are you trying to address and why is it important?): Decreasing catheter utilization in the OR to prevent catheter associated urinary tract infections (CAUTI), a metric closely tied to public reporting and pay for performance.

Aims statement (What are you trying to achieve?): Decreased catheter utilization and decreased CAUTI rates.

Proposed intervention (How do you propose to achieve your aims?): Develop and implement a protocol that establishes preoperative criteria for urinary catheter placement as well as postoperative criteria for continuation of the urinary catheter beyond the care provided in the PACU.

Evidence base (Are there evidence-based practice guidelines or other literature to support the proposed intervention? What is the current level of compliance, if known?):

The risk of CAUTI increases with increased urinary catheter duration. Several studies of postoperative patients discharged with urinary catheters showed higher rates of UTI related readmissions compared to patients with catheters discontinued within 2 days of the surgical procedure. One study of orthopedic patients by Stephan et al in 2006, showed that implementing a protocol that limited the use and duration of urinary catheterization resulted in a 60% reduction in UTI incidence. Currently, no such protocol exists at BWH. Based on data



gathered through the SCIP reviews approximately 43% of catheters are removed within 2 days postoperatively and the current CAUTI rate is worse than the national average according to Hospital Compare data.

3. Measurement Information (Click [here](#) for information on available *existing measures*; if your proposal requires new measures to be developed and collected, please describe these under *proposed measures*.)

Clinical Performance: Please list relevant measures, including current performance and expected impact of proposal.

Existing Measures

Pay-for-performance measures: CAUTI SIR for CMS IQR

Publicly reported measures: CAUTI SIR for CMS VBP and HAC Reduction Program

NSQIP measures: Post-operative UTI

Other existing clinical measures: n/a

Patient experience: n/a

Proposed Measures

Process measures (actions towards the end result, easier to measure): % adherence to protocol criteria related to insertion and duration of urinary catheters

Outcomes measures (end result, more difficult to measure): Catheter utilization and CAUTI rates

Financial Performance: Please estimate any direct initial and ongoing costs and revenues associated with your proposal, including to which department/cost center they are attributable.

Initial costs: n/a

Ongoing costs: n/a

Funding source (applicants must secure necessary funding): n/a

Revenue: n/a

Other resource considerations (including non-financial resources required or made available): n/a

4. Implementation

Timeline: 6 months (6 weeks to develop, 6 weeks to implement, 3 months to measure/monitor)

Key meetings to be scheduled: Weekly team meetings, Meeting with ID to understand scale of the problem, Meeting with key stakeholders to explain project goals and gain buy-in, Educational Sessions with OR Staff

Measurement strategy (What are your key performance indicators and how often will you review them?): Decreased catheter utilization in the OR. Will review one month of baseline data prior to intervention go-live and will monitor catheter usage in the OR 3 months post go-live. Will develop a tracking tool to audit each surgical case. The same audit tool will also be used to track protocol compliance.

Success criteria: Providers will use the protocol to limit urinary catheter insertions and duration 80% of the time. Decreased catheter utilization by at least 10%

Maintenance plan (How will performance gains be monitored and maintained long-term?): After original 3 month measurement period, will randomly select 10 cases/week to assess compliance with the protocol.

Scalability (Describe potential relevance to other hospital areas or specialties): Rationale for indication of use could be modified to other areas of hospital to improve patient care/outcomes.

Potential obstacles and mitigation strategies: Buy in from OR staff. Plan to present the data in multiple formats to ensure understanding and need for the project.



Academic dissemination plan: Plan to write up for an academic journal; will present project at Grand Rounds to educate BWH colleagues as well.