

Background

An anxious and overwhelmed patient and spouse required a Russian interpreter to relay potentially confusing discharge instructions after a routine cystoscopy procedure with an unexpected indwelling catheter. This patient inspired a clinical nurse to question the widely accepted discharge instructions, to better maintain patient centered care. The existing instructions required a nightly switching from a leg bag to a night bag, and cleaning instructions with complex ratios of water to vinegar or bleach. These instructions were often reviewed with patient and family while the patient experienced extreme pain and anxiety after surgery.

Development of PICOT Question

In November 2016, a perioperative shared governance team ("Cluster") embarked on a project to simplify instructions for urologic surgery patients that require a indwelling urinary catheter after discharge with short (~7 day) catheterizations. Utilizing a Evidence Based Decision Making (EBDM) process, the team reviewed existing evidence on the benefits of additive rinses for maintenance of indwelling catheters after discharge.

- P:** For patients who require a temporary indwelling urinary catheter at home
- I:** are instructions on rinsing the drainage bag with an additive solution
- C:** vs. omission of this content
- O:** more effective for patient comfort and safety
- T:** prior to discharge?



Much to the researchers' surprise, only **weak evidence supported additive cleaning processes**, yet **strong evidence suggested simplified D/C instructions to reduce anxiety** of our customers. The 9 to 1 water to bleach or 2 to 1 water to vinegar mixing was identified by our team as a complex instruction that could easily contribute to patient anxiety and risk.

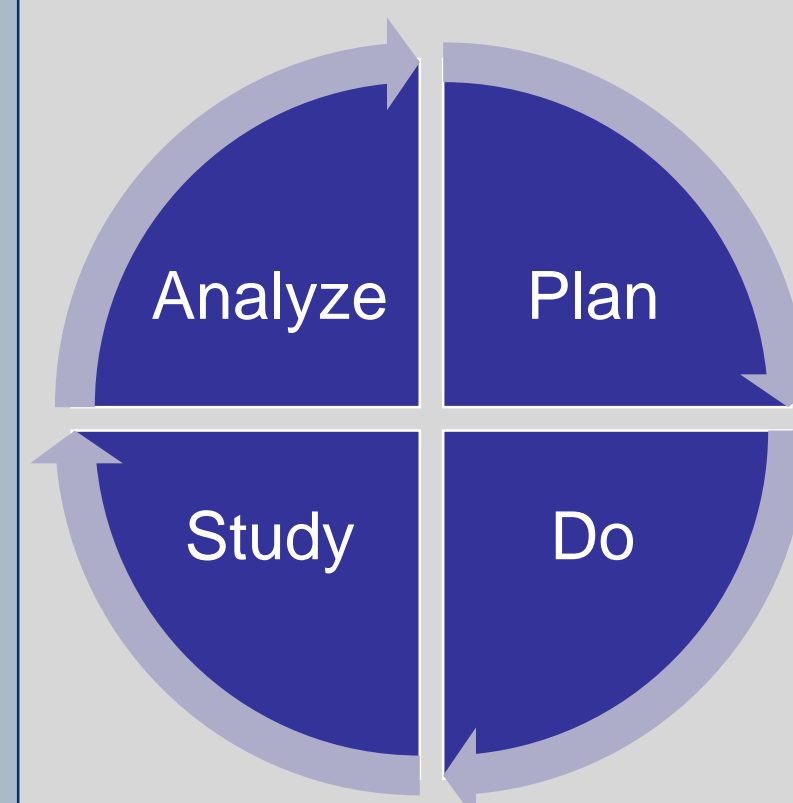
The practice offered minimal benefit to reduce infection or odor, yet was a widely accepted **"Sacred Cow", a nursing intervention or belief based on tradition not evidence.**

Objectives

Measurable goals of simplified instructions:

1. Decrease patient anxiety related to patient education and engagement
2. Improved patient satisfaction reflected in HCAHPS scores.
3. Elimination of a traditional, unscientific process not based in EBP that hinders innovation

Plan



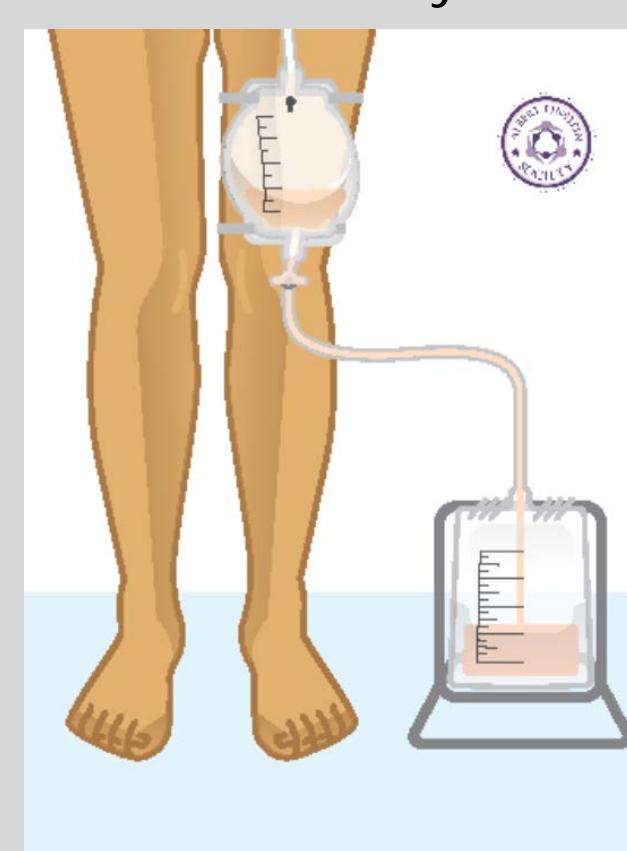
A series of rapid cycles of the Plan, Do, Study, Analyze (PDSA) cycle for EBDM was utilized to revise our target population and scope from instructions for clients of a single urologist in an ambulatory surgical center, to all standardized D/C instructions in the Einstein network.

Results

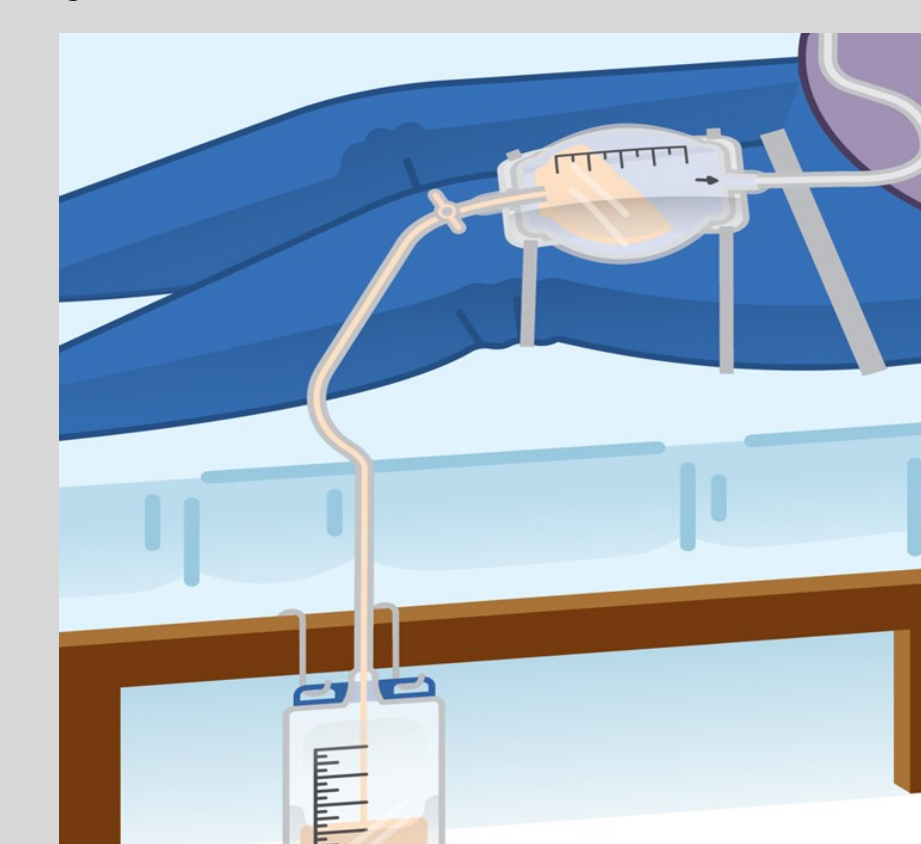
Modification of standard 3rd party instructions required collaboration with Elsevier, the patient engagement provider to our Cerner EMR system. The Cluster submitted the supporting literature review to the editors of Elsevier to facilitate the documentation change. Based on the submitted evidence, Elsevier chose to eliminate all additive rinsing instructions for **all prepopulated instructions for all of their healthcare providers, over 1000 in the US.**

The Next Phase: The B-Link System

Energized by our success, and relieved of any need to disconnect the catheter end for cleaning, Cluster sought to bring the United Kingdom standard of practice to the United States. Thanks to a generous grant from the Einstein Society, Einstein Health Network is able to offer our Post-Prostatectomy clients the **British Link System (B-Link)**. Considered best practice in the UK, this innovative "closed system" at home will bring simplicity, reduced anxiety, and reduced risk of contamination to our patients who need a temporary indwelling catheter after surgery.



1. *At the time of D/C the patient utilizes a leg bag which remains connected to the rubber catheter at all times, maintaining a closed system.*
2. *At night, the client connects a disposable night bag to the leg bag drain port and opens the drain valve on the leg bag.*
3. *In the morning, the leg bag valve is closed. Then, the night bag is disconnected, emptied, and thrown away.*



Methods

Materials Management

The B-Link system requires use of a leg bag for home use, which is a standard issue after a prostatectomy at home, and is covered by both Medicaid and private insurance.

The disposable night bags, despite the minimal cost of < \$30 for a course of 10 bags, are not covered by Medicaid as it would be considered a "complex system". This CMS decision is based on outdated data from 1997. For this reason, we requested a grant to supply our clients with the necessary products to simplify their maintenance at home and end additive rinsing and swapping of bags.



Goal -
**Improved Patient Satisfaction
Reduced Anxiety**

Video Instruction Production and Distribution

Video instruction for Patient Engagement is an effective tool to prepare patients for discharge and to improve comprehension of medical terminology particularly with those with functional or medical illiteracy (Wang et al. 2014)

The B-Link video is preloaded on an Android tablet to allow the client to peruse the instructions at their leisure before and after surgery, discreetly at a time of reduced stress or discomfort. The tablet is intended to be utilized as a personal guide to proper technique for catheter maintenance and so will not be returned for reuse.



Goal -
Reduced Readmissions with Enhanced Patient Education

Education/Collaboration of Stakeholders

In order to facilitate the paradigm shift to this new practice, Cluster identified parties that would require instruction and reinforcement on the benefits of the closed catheter system at home.

- Patient and family
- Inpatient Clinical Nurses
- Home Health RNs
- Urology Surgeons and Residents

For this reason, Cluster members chose to release our video instructions for free on social media. This can also help reduce drift back to the traditional practices of additive rinsing by caregivers and Home Health RNs.

The surgery and screening of prostate cancer is one of the most requested medical topics on search engines and social media. Despite this demand, the accuracy and motive of the information available to patients is quite limited as unbiased peer-reviewed data is often behind a journal access paywall. There is a great need to build the quality of open access scientific research for engaged clients and families.

Goal -
Open Access to High Quality Patient Engagement Media

Opportunities for Future Research

- Effect of a Closed Link System on CAUTIs vs. additive rinsing
 - This would require collaboration with medical, home health and caregivers and collection of data that is not currently prioritized.
- Effect of Video-based teaching on 30-Day readmission rates
- In light of removal of all rinsing instructions from patient engagement material, lobbying for CMS and Medicaid to accept updated research for value analysis to approve disposable night bags in the US.
- Building unbiased scientific research and patient engagement material access to better serve the empowered patients of the next generation.

Implications for Nursing Practice

1. Utilize critical thinking to challenge time-consuming unscientific interventions not based in evidence to identify and eliminate "Sacred Cows" of nursing practice.
 - Rituals hinder innovation and implementation of best practices
 - Resist pressure to "drift" back to Non-EBP tradition - Change is Hard
2. Role of Perioperative Nurse as **expert and change agent**
 - Embrace Disruptive Innovation- improves safety, efficiency, outcomes
 - Harness the energy and enthusiasm of newer RNs
 - Fresh Eyes combat inefficiency and stagnancy
 - Armed with a QSEN-based body of knowledge
3. Review of Discharge Instructions in your EMR with special attention to Custom instructions that evade regular updates

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Einstein Health Network (EHN) is comprised of the urban Einstein Medical Center, the largest independent academic medical center in the Philadelphia region, several suburban hospitals, ambulatory surgical centers, and medical offices. The network has served the area for 150 years, with the mission:

"With humanity, humility and honor, to heal by providing exceptionally intelligent and responsive healthcare and education for as many as we can reach."

With that commitment to the advancement of healthcare from evidence based innovation, EHN supports shared governance, and supports the nursing teams that are motivated to improve patient care.

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