

An Alternative to the Indwelling Foley Catheter in Incontinent Female Patients

Christine Tran, BA, BSN, RN, OCN® & Debra Rodrigue, MA, RN-BC, AOCNS®
Memorial Sloan Kettering Cancer Center & Hunter-Bellevue School of Nursing

Significance/Background

- Catheter-Associated Urinary Tract Infections (CAUTIs) are the most common type of healthcare-associated infections
 - Longer hospital stays
 - Decrease quality of life
 - Mortality
 - Increased hospital costs
- Decreasing number of indwelling catheters placed for “convenience” in incontinent patients can decrease CAUTI rates
- The literature shows a lack of effective urine collection devices for incontinent females; default options are generally diapers



- Discomfort
- Moisture-associated skin injuries
- Frequent bed pad changes

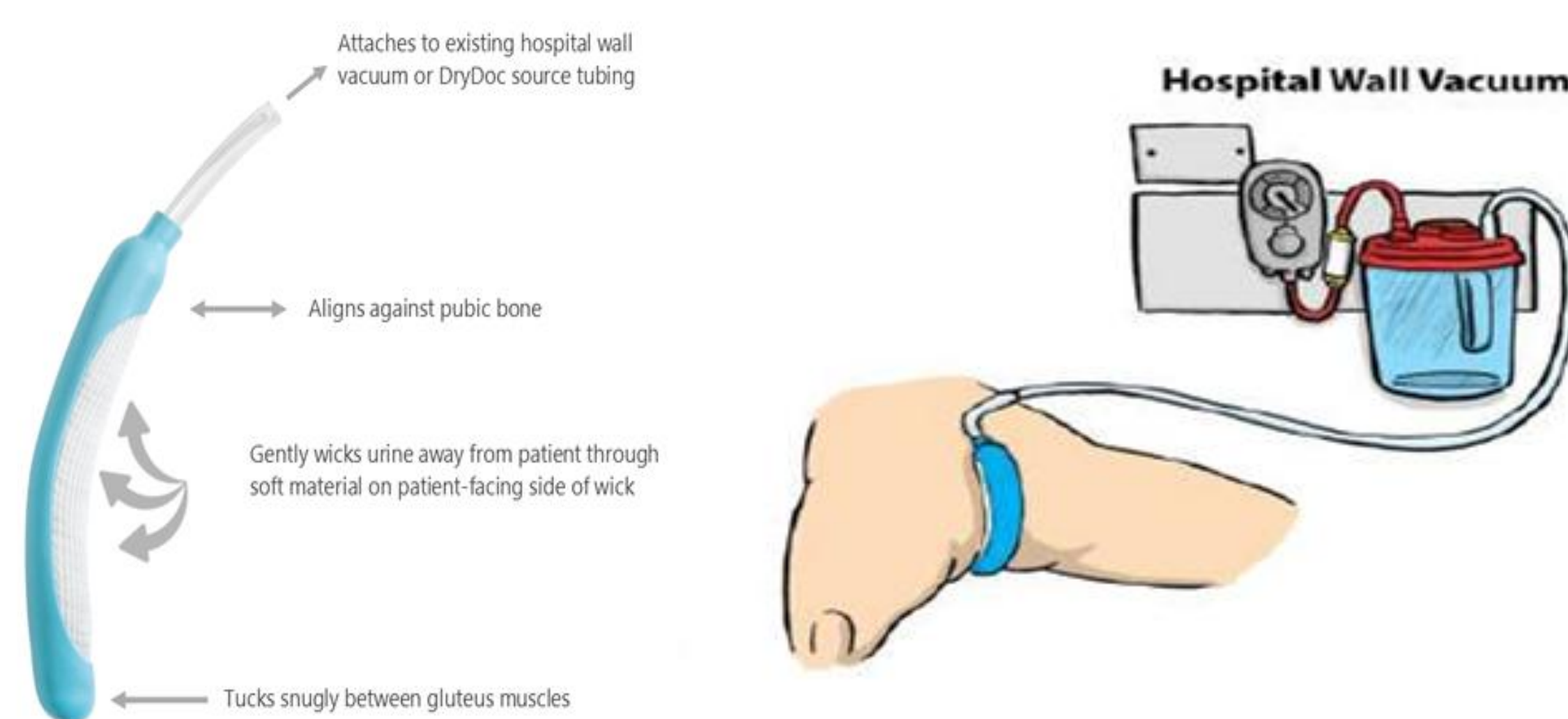
- Although many external collection devices have been developed for women throughout the last few years, it has been a challenge to find a device that effectively contains urine while avoiding damage to perineal skin

Purpose

Evaluate the PureWick® External Catheter as an alternative to the indwelling catheter in incontinent female patients

Intervention

PureWick® External Catheter was piloted in incontinent, bed-bound female patients as an alternative to the indwelling catheter



Patient population:

Female, bedbound, incontinent of urine, post-surgical/procedural immobility

Contraindicated/not recommended for patients with:

Urinary retention, latex allergy, vaginal surgery/fistula, menstruation, altered mental status, pre-existing skin breakdown on perineum, bowel incontinence (unless a fecal collection device is used), male patients

Methods

- A quality improvement project examining PureWick® was piloted on two inpatient units for one month
- Nursing staff received education on criteria and proper usage before the launch
- Cost-Benefit analysis was completed to identify potential cost-savings

Cost-Benefit Analysis

Costs for a single patient use	Cost of not using PureWick®	Cost of using PureWick®
Average Cost Per CAUTI	\$1,000	
Cost of indwelling catheter kit	\$ 13.64	
Cost of incontinence bed pad \$0.73 (x 6 per day/patient)	\$ 4.38	
Cost of PureWick® \$11 (x 2 per day/patient)		\$22
Suction canister (x 1 per day/patient)		\$ 1.53
Suction tubing (5 feet long)		\$0.29
Total Cost to Organization	\$1,018.02	\$ 23.82
Potential Cost Savings	\$ 994.20 per patient	

Data Collection and Analysis

- Surveys were given to patients, nurses and patient care technicians (PCT) to evaluate comfort, ease of use, skin integrity and overall satisfaction
- The PureWick® was piloted with 12 patients

Findings/Outcomes

3 Foley Catheters Avoided in 1 Month

Patient Outcomes

100% eligible patients were satisfied

67% felt the device was comfortable

Output was able to be tracked on all patients

.08% patients had leakage

Nurse/PCT Feedback (N= 13)

No skin injuries/breakdown related to device

93% felt device was easy to use

85% satisfied with the product

85% would use again for a patient

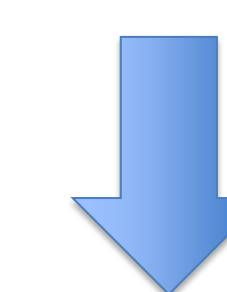
What nursing staff and patients had to say...



Discussion

- PureWick® provides an effective way to non-invasively collect and measure urine in incontinent females without using diapers or indwelling catheters
- In one month, \$ 994.20 was potentially saved per patient by avoiding indwelling catheter placements and CAUTIs

3 Foley catheters avoided



Total potential cost savings in 1 month
\$ 2,982.60

- Annually savings could exceed \$35,000
- Findings show an increase in comfort, effective urine collection, absence of skin breakdown and overall satisfaction with product during one month pilot
- External catheters such as PureWick® should be considered for incontinent females instead of indwelling catheters

Implications

Accurate urine collection. increased patient quality of life and increased patient satisfaction in incontinent females is able to be accomplished without increased risk for CAUTIs