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INCONTINENCE MANAGEMENT IN THE ACUTE CARE SETTING

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Google AI Overview:


“Incontinence management in hospitals focuses on preventing skin breakdown, maintaining dignity, and treating underlying causes, affecting up to 40% of older inpatients. Key strategies include prompt toileting assistance, scheduled voiding, protective skin care, and the use of absorbent briefs. Advanced, temporary solutions like fecal management systems (FMS) are used for acute cases, while indwelling catheters are restricted due to infection risks.”



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DISCLOSURE OF FINANCIAL RELATIONSHIPS

- I do not have any relevant relationships to disclose.



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OBJECTIVES

Upon Completion Of The Presentation, The Participant Will Be:

- able to identify and understand several product/device options for urinary and fecal incontinence for the acute care setting.
- informed of the research and recommendations associated with fecal and urinary incontinence management in the acute care setting.



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INCONTINENCE STATISTICS: ACUTE CARE

Urinary/Fecal/Dual Incontinence

- Can affect from 13% -37% of patients
- Rates up to 53% in critical care unit
- UI more common 13-33%, FI 6-16.3 %, DI 3.6-55%
- IAD can range from 19 -50%
- 10.4%-16.1% develop new incontinence during the hospital stay.
- Random sampling of acute care patients with UI showed 11% on admission and 23% on discharge



(What may be going on here?—Diagnoses, medications, use of devices)



CDC (2025), Leslie et al. (2024), Koloms et al. (2022).

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INCONTINENCE/INCONTINENCE-ASSOCIATED DERMATITIS ACUTE SETTING

Retrospective Analysis: Data reviewed from Premier Healthcare Database

- 937 Hospitals, > 15 million adult patients
- 1/1/2016-12/31/2019; Several outcome data points obtained
- Prevalence of Incontinence 1.5% Prevalence of IAD 0.7% (thought to be underreported, no ICD10)
- Incontinent Pts without IAD vs Continent Pts:
 - LOS 6.4 days vs 4.4 days (IAD Pts LOS 9.7 days vs 6.4 days)
 - 1.4 times more likely to be readmitted: (IAD Pts 1.3 x more likely to be readmitted than Incontinent pt. without IAD)
 - 4.7 times more likely to have a sacral PI upon admission
 - 5.1 times more likely to develop sacral HAPI (IAD 2.0 X more likely to develop HAPI than incontinent pt without IAD
 - 5.8 times more likely for sacral PI to progress in severity
- Total Index hospital costs 1.2 X higher for incontinent pts, 1.3 X higher for IAD Pts



Kayer et al. (2021)

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INCONTINENCE AND SKIN INTEGRITY

IPUP (International PU/PI Prevalence) survey, 2018-2019

- Incontinence noted in 32% of pts (33% UI, 12% FI, 55% DI)
- HAPIs: 27.4% continent pts; 72.6% incontinent pts, DI had the highest rate
- Unstageable/DTPI HAPIs > incontinence patients
- Product usage:
 - indwelling catheter
 - bowel management systems
 - absorbent briefs
 - external urine containment products



Koloms et al (2022)

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Setting the Stage: Options in Continence Management in Acute Care

Multiple External/Internal Devices for UI/FI Management

- Body Worn Absorbent Products
- Topical Skin Care Products
- Bed Pads (Disposable/Reusable)
- Indwelling Urinary Catheters
- Female/Male External Urinary Collection Devices
 - Non-Suction
 - Suction
- Fecal Containment Devices
 - Internal
 - External

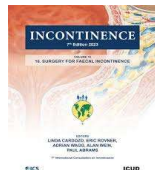


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REPORT OF THE 7TH INTERNATIONAL CONSULTATION ON INCONTINENCE

Management Using Continence Products

- Incontinence, 7th Edition, 2023
- Evaluate recent studies/offer recommendations
- **Ch 19: Using Continence Products**
- Article states clinicians, product users, other decision-makers often lack skills and information to make the best choices or offer reliable information.



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POLLING QUESTION

When assessing a patient, what was the maximum number of linens, incontinence underpads, BWAP, or other incontinence management products you have seen used on one patient at one time, including indwelling catheters or FMS (anything but the mattress and bottom sheet)

- 1) 2
- 2) 4
- 3) 6
- 4) More than 6



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When assessing a patient, what was the maximum number of linens, incontinence underpads, BWAP, or other incontinence management products you have seen used on one patient at one time, including indwelling catheters or FMS (anything but the mattress and bottom sheet)

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this package title

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BODY WORN ABSORBENT GARMENTS

How Do We Know What to Choose?

- WOCN Society: A Decision Support Algorithm For Body Worn Absorbent Products (BWAP)
- <https://bwap.wocn.org#home>
- "Assessment, Selection, Use, and Evaluation of Body Worn Absorbent Products for Adults With Incontinence: A WOCN Society Consensus Conference", published in Journal of Wound, Ostomy and Continence Nursing: May/June 2018 - Volume 45 - Issue 3 - p 243-264.

- Patient preference, type of incontinence gender (similar products uses), independence
- Hospital contract/What is available



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BODY WORN ABSORBENT GARMENTS

Body Worn Absorbent Garment: Pads and Inserts

- Come in varying sizes
liners 6" x 4" x 2" up to 27"x 14" pads
- Breathable/ Non-Breathable/what is the backing
- Built-in pockets to help control fecal/urine leakage
- Can be worn alone or inside briefs or pants
- Can be used for minimal fecal leakage, such as with Hartmann's Colostomy surgery/perianal fistulas, mild FI
- Refer to the BWAP Algorithm
- Consider pad/product count audits



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BODY WORN ABSORBENT GARMENTS

Recommendation/Research

- Murphy et al 2023 7th International Continence Report Recommendations
 - no one continence product for everyone
try variety of products
 - similar products across different brands
may not have same effectiveness
 - superabsorber materials should be selected
 - pads should be used with stretch mesh pant
 - independence in self product use should be considered



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TOPICAL SKIN/CONTINENCE PRODUCTS

Barrier Creams/Topical Products

- Barrier creams/pastes: Zinc oxide, calamine lotion, petrolatum, dimethicone, Cellulose gum, silicone: combinations of these.
- Topical powders/ostomy powder/antifungal powder/antibiotic powder
- Astringents such as aluminum acetate solutions: sprays or gauze soaks 15 minutes
TID/QID
- Topical steroids: cream/ointments
strength, what is in the pharmacy
- Cyanoacrylates/polymers
- Need to know the ingredients/ how to apply or remove; can they be layered?



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INCONTINENCE BED PADS

- Reuseable vs Disposable
- Layers vary/ Microclimate pads
- Breathable or plastic backing
- Disposable - acute setting,
 Reuseable - skilled or home settings
 some acute settings use these
- Costs: \$6-\$10/each for washable
 \$1-\$3/each for disposable
- Appropriate for the bed surface
- Audit by pad count






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RESEARCH ON INCONTINENCE BED PADS

Frances et al 2017: Disposable vs Reusable absorbent underpads for prevention of HAPI and IAD.

RCT study; acute care setting;
252 pts with reusable underpads,
210 pts with disposable underpads;

Results:
 HAPI lower with disposable vs reusable **5% vs 12%** **P=0.02**.
 LOS lower with disposable underpads **6 vs 8 days** **P=0.02**
 Rates of IAD were not significantly different between the two types of underpads **P=0.22 (Could use more research)**





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ACCEPTABLE USES OF INDWELLING URINARY CATHETERS (IUC/IUD)

CDC Recommendations

- 1) Urinary Retention
- 2) Bladder Outlet Obstruction
- 3) Accurate measurement of urine output
 in critically ill patients
- 4) Stage 3 and Stage 4 pressure injuries with incontinence
- 5) Perioperative use for certain selected procedures
- 6) Prolonged immobilization
- 7) Assist in comfort for end-of-life care



CDC.org (2025)



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WHY DO WE LIMIT INDWELLING URINARY CATHETERS (IUC/IUD)

Statistics on Catheter-Associated Urinary Tract Infection (CAUTI)

- UTI is the 5th most common HAI
- Approximately 75-80% of complicated UTIs are related to a urinary catheter
- 15-25% of hospitalized patients use urinary catheters every day
- Bacteriuria leads to bacteremia and sepsis in 5% of pts
- Can increase LOS by 2-4 days
- Approximately 50-70% of CAUTIs might be prevented

CDC (2025), Beeson, T., Pittman, J., & Davis, C. (2023), Averach et al. 2024



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WHY DO WE LIMIT INDWELLING URINARY CATHETERS (IUC/IUD)

Statistics on Catheter-Associated Urinary Tract Infection (CAUTI)

- Approximately 450, 000 CAUTI related harm events/year
- Costs higher than 340 million with around \$1,000-\$10,000 per CAUTI
- Mortality approximately 13,000 deaths
- National Health Safety Network state average CAUTI rates 3.1-7.4/1000 catheter days
- There is a 3%-7% increased risk of developing a CAUTI for every day a urinary catheter remains in place

CDC (2025), Beeson, T., Pittman, J., & Davis, C. (2023)



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IMPLEMENTING STRATEGIES TO PREVENT CAUTI WITH IUC/IUD

- Review the acceptable uses of IUC/IUD
- Provide aseptic technique with standard protocols for placement
- Educate clinicians on the appropriate procedure for insertion
- Have an extra person for placement and insertion of catheter
- Anchor/secure device
- Empty the drainage bag regularly, keep the bag off the floor
- Perineal/catheter: daily hygiene, soap and water, hygienic cloths
- Have CAUTI Champion in place for daily assessment of patients with IUC
- Trial of intermittent catheterization
- Use of External Urinary Collection Devices (ECD)

CDC (2009, 2025), Patel et al., (2023)





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USE OF IUC/IDC: POINT PREVALENCE STUDY CPG ADHERENCE: ACUTE CARE HOSPITAL

- Single quaternary hospital 970 beds in Australia, 502 total patients, 22 wards,
- Study completed in 1 day, clinical and research nurses in teams of 2

IUC/IDC Data Collection Tool and Clinical Practice Guideline Adherence (CPG)
Obtained both documented and observed clinical data

- ❖ Date, time, location of IUC/IDC insertion, Who inserted catheter (RN)
- ❖ Indication and number of insertion attempts
- ❖ IUC/IDC Size/balloon size and material of the IDC
- ❖ Daily review of the IUC/IDC need, Drainage bag off floor, < 2/3 full
- ❖ IUC/IDC cleanliness, bag connections secured
- ❖ Patients were given 4 questions on IUC/IDC and the care received

Wickins et al., (2025)

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USE OF IUC/IDC: POINT PREVALENCE STUDY CPG ADHERENCE: ACUTE CARE HOSPITAL

Results of the Study

- 77(15.3%) had an IUC/IDC for a median time of 99.6 hours (4.15 days)
- Median age 64-70% Male, 30% female
- 25% -inserted at outside facility
- 37% inserted in ICU, 96%-98% documented date, time, size, type of catheter

Documentation compliance for CPG:

- ranged 4%-98% for IUCs placed at the study hospital
- 0%-74% for IUC/IDCs placed at outside facility
- 43% had no securement device,
- 55% were not correctly connected to the securement device that was present
- 67% of in-house IUC/IDCs had no documentation on balloon inflation
- 16% from outside facilities had no documentation of balloon inflation
- No removal plan for 57% of catheters
- Patients/family not aware of why they have the catheter

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OPTIONS IN EXTERNAL URINARY COLLECTION DEVICES (EUC) NON-SUCTION PRODUCTS

Non-suction-Variety of devices
Female

- Adhesive pouch
- Female Urinal/Bedpan
- Non-adhesive silicone urethral cap
- **Duration of use is product dependent-**
24-48 hours or reusable

Precautions: Perineal/buttocks skin injury
Bedpan/urinal placement for short duration
Monitor using disposable incontinence pads with devices

- MDRPIs




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OPTIONS IN EXTERNAL URINARY COLLECTION DEVICES (EUC) NON-SUCTION PRODUCTS

Non-suction-Variety of devices

Male

- Adhesive/non-adhesive/urinal
- Latex/Non-Latex/Silicone condom cath
- Condom catheter wear time 24-48 hours
- Sizing matters for condom catheters
- Prepare skin: clip hair, barrier film
- Correct use & evaluation of product
- BWAP- see Algorithm
- Monitor MARS, Monitor MDRPIs

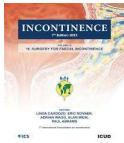




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REPORT OF THE 7TH INTERNATIONAL CONSULTATION ON INCONTINENCE

Recommendations on External Urinary Collection Devices

- Research conducted on products from studies 2016-2020
- Handheld urinals: minimal research on urinals. They should provide user to empty bladder and contain the urine. Urinals for both men and women can be viable in a range of options
- Other external urinary collection devices discussed were male sheaths or condom catheters. Studies noted no difference in UTI with sheath vs indwelling catheter but pain, bleeding, discomfort decreased with the sheath. Poor fitting of devices by nursing staff noted. Recommendations: Sheath should be used when possible; training for devices needed. No discussion of EUC-suction devices


Murphy et al., 2023, Cardozo et al 2023

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APPROPRIATE CANDIDATES FOR EUC-SUCTION DEVICES

Male and Female patients with Urinary incontinence; all settings	Patients that are cooperative and can tolerate the EUC-suction	Critically ill patients in ICU areas where hourly urine output is not required	Patients with AD/MASD in the perineal/perianal/buttocks areas
Immobile patients/or mobility challenged patients/bedrest/recovering from surgery	Patient/Caregiver requests to manage urinary leakage/comfort care, hospice	Patients with neurogenic dysfunction, Lower Urinary Tract dysfunction without sensory awareness	

CDC 2025



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FEMALE/MALE SUCTION (EUC) EXTERNAL URINARY COLLECTION DEVICES

Suction products- FA-2016, MA- early 2020s

- Depending upon product use, it is 12 to 48 hours.
- Suction around 40 mmHg – 125 mmHg
- Monitor use of external suction
- Caution with bedpan use
- Prepare skin: clip hair, barrier films,
- Correct use & evaluation of product
- Prevent MARSJ (Medical Adhesive-related Skin Injury), know ingredients

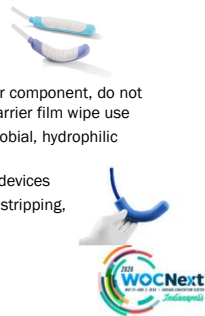


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TYPES OF EUC-SUCTION

Female Anatomy-Non Adhesive

- Placement- pubic bone-perineum, inside labia
- Suction:
 - 1) 40-120 mmHg (higher suction may collapse inner component, do not cover the small opening in back. Change q12 hrs, barrier film wipe use
 - 2) 125 mmHg suction, 360-degree suction, Antimicrobial, hydrophilic foam, change up to 48 hours,
- Considerations: Do not use pads, towels, etc. to hold devices in place. Removal from top to bottom to decrease skin stripping, consider the number of BWAP, bed liners, linens being used on LAL surface with EUC-suction



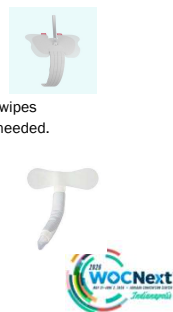
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TYPES OF EUC-SUCTION

Female Anatomy-Adhesive

Placement- Place device from perineum to suprapubic area: above anus, inside labia,

- Suction:
 - 1) 40 mmHg start with low end suction and move higher as needed. Wear time q12-24 hrs, barrier skin wipes
 - 2) 60 mmHg suction, start with low end and move higher if needed. Wear time 12-24 hrs, routine perineal care, barrier wipes
- Considerations: consider the number of BWAP, bed liners, linens being used on LAL surface with the EUC-Suction. May need to clip the pubic hair, Do not use with heavy menstruation without use of tampon, diarrhea without fecal management system in place, open ulcerations/lesions



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TYPES OF EUC-SUCTION

Male Anatomy-Adhesive

Applications with the adhesives vary,

Penis placed into a pouch and then sheath slides upward and attaches to the suprapubic are

- Suction: Varies with the device

- 1) 40 mmHg start with low end suction and move higher as needed. Wear time q12-24 hrs
- 2) 60 mmHg suction, start with low end and move higher if needed, Wear time up to 24 hr. routine perineal care
- 3) 125 mmHg suction, Wear time up to 48 hr.. vented system,

- Considerations: Know the product that is being used, barrier films, pubic hair clipping may be recommended, MARS



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EFFECTIVENESS OF EUC-FA-SUCTION

Evaluated the effectiveness of EUC in critically ill women, rates of indwelling catheter use, CAUTI rates/IAD Rates

- Research study: Large Academic Hospital; Dec 2019-April 2021
- 50 patients, in 4 critical care areas: 7-day study
- Trends in indwelling catheter use, CAUTI, IAD were retrospectively studied 2016, 2018, 2019.
- Years were chosen to reflect before (2016) and after (2018,2019) the introduction of EUC for both men and women
- Due to IAD data not being collected monthly, one month of the year had complete data

Beeson, T., Pittman, J., Davis, C (2023)



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EFFECTIVENESS OF EUC-FA-SUCTION

2023 Study-Evaluate the effectiveness of EUC-FA in critically ill women, rates of indwelling catheter use and CAUTI rates/IAD

- EUC-FA diverted 85.5% of patient's urine, individual effectiveness ranged from 44.8%-99.7% median 87.6%
- Use of indwelling urinary catheter down: 2016 (43.9%) 2018 (40.6%) 2019 (36.6%) (P< .01)
- Rate of CAUTI was decreased during 2019 compared to 2016 (1.34/1000 catheter days vs 0.50/1000 catheter days p=.08)
- Rate of IAD reduced 42% from 2018-2019, and reduction of 29% from 2016-2019 not statistically significant but still relevant for clinicians
- Higher rates of UI noted in 2018 and 2019 and was thought to be due to decrease indwelling catheter use.
- Limitations: COVID time period, staff shortages, UI/IAD prevalence only 1 month, study time period was during a hospital focus to decrease CAUTI

Beeson, T., Pittman, J., & Davis, C. (2023)



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EXTERNAL FECAL COLLECTION PRODUCTS

External Adhesive Products

- Non-invasive
- May have hydrocolloid or silicone type of adhesive
- Can be challenging for application
- Consider some barrier films for increased adhesion, clip any hair, barrier rings/strips or tackifier
- Prevent **MARSI** (Medical Adhesive-related Skin Injury), know ingredients





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INTERNAL FECAL/BOWEL MANAGEMENT (FMS/BMS) DEVICES

Critical Roles of FMS Devices (Especially in the ICU- High Prevalence)

- Available early 2000s
- Infection Prevention (managing/collecting fecal waste)
- Preventing cross contamination: (C-Difficile, VRE, decreased nosocomial infection)
- Decreasing IAD/MASD (reducing risk of PI formation)
- Minimizing/preventing PI contamination
- Improved patient safety, comfort, dignity
- Assisting clinicians in patient care: (Hygiene needs, linen changes)
- Minimizing treatment costs: (direct/indirect costs-complications)

Gutting & Pflutzner, 2024




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Contraindications For Internal FMS/BMS Devices

Rectal surgery within the last year	Suspected or confirmed rectal/anal tumor, stricture/stenosis/extensive hemorrhoids	Rectal mucosal impairment/ulcerations. Severe/ischemic proctitis	Other indwelling devices or medications already in use (suppositories, rectal thermometers)
Limited time to standard of 29 days	Any rectal/anal injury or mucosal impairment	Any sensitivity or allergen to product components	

Milne, C & Brindle, T., 2026



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INTERNAL FMS/BMS COLLECTION DEVICES

Considerations

- Invasive
- Limited time in place (29 days in general)
- Leakage can be a concern
- Depending upon type, monitor for pressure injuries (6 o'clock position)
- Consider a moisture barrier at anus
- Understand the type of internal system that is being used, some air, some fluid, some neither, look for updated versions
- Have an algorithm in place for management and auditing, be mindful of no stool in device



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Algorithm Options for Acute Fecal Incontinence with Diarrhea (AFId)

Anticipated Good Outcome:

Manage with Traditional Methods

- Etiology: medication/bowel prep/viral/food, travel
- Anticipate timeline: short
- Patient mobility- mobile or mobile soon
- Hygiene/Skin protection/topical skin products
- BWAP availability/absorption
- External devices
- Diet assessment/Dietician Eval
- Consider risk of complications or if AFId continues for a longer timeline ? 2-3 days

Anticipated Risk of Complications/Longer time-line. Manage with more Aggressive Methods

- Etiology: Medication, enteral feeding, medical diagnosis, infection
- Multidisciplinary team: MD, Pharmacist, Dietician, Nursing, Therapy connected
- Specialty Bed/Support Surface
- BWAP/bed liners
- Hygiene/Skin protection
- Internal FMS/ BMS
 - Protocol for FMS/BMS
 - When to place/remove
 - Q-shift/daily checks?
 - Documentation



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INTERNAL FMS/BMS DEVICES

Recommendations of 7th International Consultation on Incontinence

- Rectal catheter should be considered for:
 - fecal diversion
 - use in acute, critically-ill patients unable to manage bowel function
 - skin protection and assistance in wound healing

Clinical Evaluation: Industry's First Automated Stool Management Kit Vargo, D 2025 SAWC Spring Poster

- 20 Patients, 34 assessments
- 100% effectiveness with fecal diversion, 1.8% leakage vs higher for Inwelling indwelling balloon catheters (IBC)
- Nursing time: avg 6.8 minutes for initial mgt, (60 min IBC), < 1 minute f/u
- No anorectal trauma, bleeding, necrosis, or device problems
- No radial pressure



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QUALITY IMPROVEMENT PROJECT: DECREASE MUCOSAL PI FROM RECTAL TUBES IN MICU

Identified Problem:

- Midwestern Hospital saw an increase in Mucosal PI by 33% in 2022
- Mucosal PI were 8% of total MICU Pressure Injuries
- RCAs completed on PI development
- Noted that extended use of FMS led to decreased rectal tone and increased rectal mucosal injury

Goal:

Decrease rectal tube injuries in MICU to less than 5% of total MICU PI by June 2023

Matson, Harworth, Liszkay (2023)



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QUALITY IMPROVEMENT PROJECT: DECREASE MUCOSAL PI FROM RECTAL TUBES IN MICU

Practice Changes Included:

- Change from zinc-based barrier cream to silicone-based barrier cream
- Internal balloon check every shift
- Use of split 4x4 gauze at FMS insertion site for padding/protection
- FMS drainage bags secured to side of bed vs footboard
- Daily QC audits "Rectal Tube Tracker" instituted
- For output < 150 ml during 12-hour shift (for 2 shifts in a row) or after 10 days, rectal tube removed for a minimum of 24 hours as a break.

Outcome:

- 0 (Zero) mucosal PI for 2023, 224 FMS, Avg dwell time 5.6 days

Matson, Harworth, Liszkay (2023)



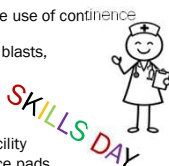
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EDUCATION FOR URINARY/FECAL INCONTINECE MANAGEMENT

- ❖ Routine education is needed for all staff involved in the use of continence products
- ❖ Annual skills days, Huddle topics, Posted fliers, E-Mail blasts, Micro-learning

Education To Include:

- IUC/IUD clinical guidelines/documentation for your facility
- Body-worn absorbent garments/ Linens and continence pads
- External Urinary Collection Devices: Suction and non-suction
- External Fecal Management Systems
- Internal Fecal Management Systems
- Algorithms/EHR systems for Documentation




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POLLING QUESTION

Do you have a CAUTI Champion/team at your facility?

- 1) Yes
- 2) No



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**Do you have a CAUTI
Champion/team at your
facility?**

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POLLING QUESTION


Do you have a Continence Champion/Team at your facility that looks at all continence devices, BWAP and related skin issues?

- 1) Yes
- 2) No



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Do not exit
Here - consider the
design



Do you have a Continence Champion/Team at your facility that looks at all continence devices, BWAP and related skin issues?



① The Slido app must be installed on every computer you're presenting from **slido**


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FINAL THOUGHTS FOR URINARY AND FECAL INCONTINENCE MANAGEMENT

Routine Audits Needed

- *Not just for IUC
- *Proper use and individual effectiveness of urinary/fecal incontinence products
- *Room checks for multiple devices, creams, ointments, and underpads
- *If leakage persists, investigation is warranted, **not just hygiene**, and a new device or skin care. Move beyond this thinking
- *Correct suction settings, appropriate tubing connections, and correct placement
- *No use of extra towels, pads, briefs, etc. with these EUD/EUC or FMS devices
- *Clinical Practice Guideline adherence



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FINAL THOUGHTS FOR URINARY AND FECAL INCONTINENCE MANAGEMENT

- 1) Consider Continence Experts/CAUTI Champions in all healthcare settings
- 2) Integrate new and established QI and Research findings
- 3) Consider your own QI and research opportunities, male studies, product evaluation/management, prevalence studies linking causes, incontinence with risk factors, New algorithms-Fecal





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