# Falls: The Series

May - October 2023

Best Practices to Reduce Falls Associated with Toileting

Learning Session 3 – July 5, 2023



### IPRO HQIC

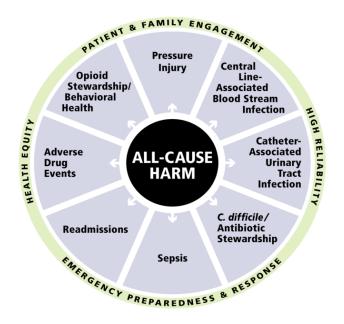
#### What are HQICs?

**Data-driven.** It's the data that help hospitals measure progress toward quality improvement (QI) gains. Hundreds of thousands of patients and families benefit from CMS-supported QI projects that make today's hospital stays safer and improve the quality of hospital care.

**Dynamic and collaborative.** HQICs partner with small, rural, and critical access hospitals and facilities that care for vulnerable and underserved patients. Their quality improvement consulting and expertise – offered at no cost to the hospitals – helps hospital leaders and clinical teams develop local QI projects designed to:

- Reduce opioid misuse and adverse drug events.
- Increase patient safety with a focus on preventing hospital-acquired infections.
- Refine care coordination processes to reduce unplanned admissions.

HQICs also share their QI resources to assist hospitals with pandemic responses and emergency preparedness.



#### The federally funded Medicare Hospital Quality Improvement Contractor (HQIC) in 12 states

IPRO (joined by)

- Healthcentric Advisors
- Kentucky Hospital Association
- Qlarant
- Q3 Health Innovation Partners
- Superior Health Quality Alliance
- American Institutes for Research (AIR)
- QSource

#### **States**

- MA PA
- NE DE
- NY MD
- OH MI
- KY MN
- NJ WI



## The IPRO QIN-QIO

### The IPRO QIN-QIO

- A federally-funded Medicare Quality Innovation Network – Quality Improvement Organization (QIN-QIO)
- 12 regional CMS QIN-QIOs nationally

#### IPRO:

New York, New Jersey, and Ohio

#### **Healthcentric Advisors:**

Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont

### Qlarant:

Maryland, Delaware, and the District of Columbia

Working to ensure high-quality, safe healthcare for 20% of the nation's Medicare FFS beneficiaries





### Series Schedule: 2 – 3 pm EST

Date	Session #/Topic
Wednesday, May 3	1. Enhancing Capacity – Reengineering Fall and Fall Injury Programs: Infrastructure, Capacity and Sustainability
Wednesday, June 7	2. Redesigning Post-Fall Management: Prevent Repeat Falls
Wednesday, July 5	3. Best Practices to Reduce Falls Associated with Toileting
Wednesday, August 2	4. Safe Mobility is Fall Prevention
Wednesday, September 6	5. Population-Specific Fall and Injury Prevention
Wednesday, October 4	6. Reducing Fall-Related Injuries: Protective Interventions' Evidence, Application and Success

### Your Participation Will:

- Support organizational systems and teams to expand program infrastructure and capacity;
- Help you redesign your fall prevention and injury reduction program;
- Complement your evaluation program; and
- Provide access to an online learning community to increase exchange of experiences, innovations, and best practice implementations.

### Series Speaker

### Patricia A. Quigley, PhD, APRN, CRRN, FAAN, FAANP, FARN

#### **Nurse Consultant**

- Dr. Quigley is the President and Managing Member of Patricia A. Quigley, Nurse Consultant, LLC, which provides consultation to healthcare systems and patient safety organizations to advance patient safety programs and re-engineer integration of innovation at the point of care.
- For more than 45 years, Dr. Quigley has practiced in the field of rehabilitation nursing. She is recognized for her leadership as a speaker, scholar, researcher, author, educator, and mentor.
- Dr. Quigley's contributions to patient safety, nursing, and rehabilitation are highly respected both nationally and internationally. She is known for her emphasis on clinical practice innovations designed to promote independence and safety for the elderly.
- Dr. Quigley is currently a member of the National Quality Forum's Prevention and Population Health Committee.



# Best Practices to Reduce Falls Associated with Toileting July 5, 2022



Patricia A. Quigley, PhD, MPH, APRN, CRRN, FAAN, FAANP, FARN, Nurse Consultant, e-mail: pquigley1@tampabay.rr.com

# Our Webinar Schedule

- Webinar 1: May 3, Enhancing Capacity: Reengineering Fall and Fall Injury Programs: Infrastructure, Capacity and Sustainability
  - Coaching Session: May 17, Open Forum, Discussion
- Webinar 2: June 7, Redesigning Post Fall Management
  - Coaching Session: June 21, Open Forum, Discussion
- Webinar 3: July 5, Best Practices to Reduce Falls
   Associated with Toileting
  - Coaching Session: July 19, Open Forum, Discussion

# Our Webinar Schedule (cont.)

- Webinar 4: Aug. 2, Safe Mobility is Fall Prevention
  - Coaching Session: Aug. 16, Open Forum, Discussion
- Webinar 5: Sept. 6, Population-Specific Fall and Fallinjury Prevention
  - Coaching Session: Sept. 20, Open Forum, Discussion
- Webinar 6: Oct. 4, Reducing Fall-related Injuries:
   Protective Interventions, Evidence and Application
  - Closing Coaching Session: Oct. 18, Open Forum, Discussion
- Thank you!



Challenge and inspire you to add precision to your patient safety practices, fall prevention, and toileting clinical practices to maximize safe and individualized toileting, improve health and function

# My Hope

- Change your practice beyond an over-reliance on universal toileting precautions and approaches applied to all patients
- Implement individualized/population-specific care planning to safe toileting and fall prevention in bathrooms



- Profile trends of falls associated with toileting over the years
- Examine patient and environmental fall risk factors
- Generate strategies to redesign a population-based approach for scheduled and assisted toileting while creating a safe environment



# Falls Associated with Toileting Refer to

- The activities specific to navigating the physical environment to use the toilet
- The physical act of elimination
- The environment design of the bathroom
- Staffing assistance

They are complex and interactive.

One of the top 10 patient safety concerns in hospitals (ECRI, 2014)



# Early Findings: Where Falls Happen

- Some 3-20 percent of inpatients fall at least once during their hospitalization.
- Around 80-90 percent of falls that occur in hospitals are unwitnessed.
- About 50-70 percent occur from the bed, bedside chair, or while transferring between the two, while 10-20 percent occur in toilets or bathrooms (a disproportionally large number given the short amount of time patients spend there).

(Inouye, et al, 2009; Oliver et al, 2010)



# Prevalence of Inpatient Falls Associated with Toileting (2010)

- Qualitative Study Michigan Hospital
- Archived falls over 3-year period; 4 adult inpatient units
- 547 falls July 2005-2008
- 45.2 percent of all falls related to toileting
- Most common theme falling on way from the bed or chair to the bathroom
- Nurses: focus on safe pt transfers
- Develop individualized prevention plan of care

Tzeng, H-M. (2010). Understanding the prevalence of inpatient falls associated with toileting in adult acute care settings. JNCQ, 25(1): 22-30. doi: 10.1097/NCQ.0b013e3181afa321.



- Retrospective exploratory study archived falls over 3-year period; 4 adult inpatient units
- 547 falls July 2005-2008
- 247 (45.2 percent) associated with toileting
- 87 (15.9 percent) on the way from bed or bedside chair to the bathroom or back
- 70 (12.8 percent) getting out of or back to bed
- 55 (10.1 percent) slipped off the toilet or bedside commode
- 27 (5.0 percent) moving from bed to BSC or back
- 8 (1.4 percent) using urinal while standing or sitting on edge of bed or chair Tzeng, H-M., Yin, C-Y. (2012). Toileting-related inpatient falls in adult acute care settings. MEDSURG Nursing, 21(6): 372 -377.



- Describe prevalence and characteristics of toileting-related falls in hospitalized older adults
- Retrospective analysis of falls related to night-time toileting in patients 60 years and older over a 1-year period
- 34 percent of falls related to toileting with at least 44 percent occurring during the night
- Peaked at 11 pm-1 am, maximum supine-induced diuresis
- About 50 percent of night falls occurred at bedside
- Half had no strategies for toileting documented in care plan

Rose, G., Decalf, V., Everaert, K., Bower, W. (2019, July 18). Toileting-related falls at night in hospitalized patients: The role of nocturia. Australasian Journal on Ageing, <a href="https://doi.org/10.1111/ajag.12696">https://doi.org/10.1111/ajag.12696</a>



# Individualized Toileting: Your Staff Must Consider

- Patients' individual toileting needs
- The activities specific to navigating the physical environment to use the toilet
- The physical act of elimination
- The environment design of the bathroom
- Staffing assistance

They are complex and interactive.

# Urinary Sxs Linked to Falls

- Urgency
- Urgency Incontinence
- Stress Urinary Incontinence
- Daytime and Nocturnal Urinary Frequency

Soliman, y., Meyer, R., Baum, N. (2016). Falls in the elderly secondary to urinary systems. Rev Urol, 18(1); 28-32.



# **Individual Toileting Needs**

- Cognition
- Mobility
- Continence
- Frequency
- Level of Assistance
- Medications



- Existing research suggests that the causes and consequences of some falls, rather than the falls themselves, can lead to incontinence issues.
- The need for frequent toileting and/or urgency to void increases risk of falls by 26 percent and bone fractures by 34 percent.

# Causes of Falls

- Impairment of lower and upper extremities,
- Vision and hearing loss,
- Problems with emotion regulation,
- Dementia,
- Medications (Diuretics),
- Decreased fluid intake,
- Urinary tract infection



# Consequences

- Limited mobility dependency in toileting
- Injuries dependency in toileting
- Strength impairment
- Onset or worsening of bladder incontinence



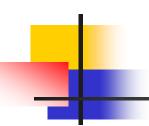
## Incontinence

- Per WOCN, incontinence suffers from stigma and low reporting.
- Approximately 80 percent of people affected by urinary incontinence can be cured or improved.
- Incontinence is not a lost cause.
- The battle should be fought continually.



# Incontinence

- More prevalent with age, but not a natural part of aging
- Comprehensive, person-centric assessments
- Interprofessional approach to care planning
- Set goal to reduce number of incontinence per day or
- Restore continence



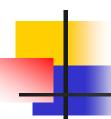
# WHO Evidence Profile: Urinary Incontinence 2017

- Prompted voiding for management of urinary incontinence can be offered for older people with cognitive impairment.
- Using continence products should be considered for older people who are bedridden or experiencing severe declines in mental and/or physical capacities.

WHO Integrated care for older people (ICOPE). Guidelines on community-living interventions to manage declines in intrinsic capacity.2017

https://www.who.int/ageing/health-systems/icope/evidence-centre/ICOPE-

evidence-profile-urinary-incont.pdf



# **Incontinent Briefs**

- One brief does not work for all
- If not changed once soiled, cause skin irritation, UTI, discomfort, odor
- Used in combination with toileting program
- Fitted for each patient
- Staff must change frequently



# **Incontinence Products**

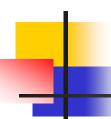
- Fitting protocol
- Absorbent pad to keep skin dry
- Serve a skin barrier function/reduce skin irritation/ UTIs
- Reduce frequency of clothing and linen changes
- Decrease agitation/restlessness
- Increase patient's sleep duration

# Where Do Your Falls Occur?

### Patients'

- Room
- Bathroom
- Hallways
- Congregate areas

Needs for assisted mobility vary



## Patient Assessment

- Cognitive status
- Balance sitting, standing
- Ambulatory status (level of assistance)
- Assisted mobility (contact guard vs standby assist)
- Sensory neuropathy
- Continence
- Orthostasis

(If falls are due to intrinsic fall risk factors, anticipate physiological falls.)



### **Environmental Assessment**

- Bed height
- Safe exit side (bed transfer side)
- Pathway to the bathroom
- Toilet access and placement
- Toilet height
- Grab bars
- Bedside commode vs. raised toilet seat
- Footwear

(If the fall is due to environmental extrinsic factors, it is an accidental fall.)



## Interaction Effect: Patient and Environment

### Fall prevention involves:

- Managing a patient's underlying fall risk factors (e.g., problems with walking and transfers, medication side effects, confusion, frequent toileting needs) and
- Optimizing the hospital's physical design and environment (toilet height, grab bars, mobility devices). (Ganz, et al, 2013)
- Safe mobility, individualized care planning
- Modified environment and scheduled, assisted toileting

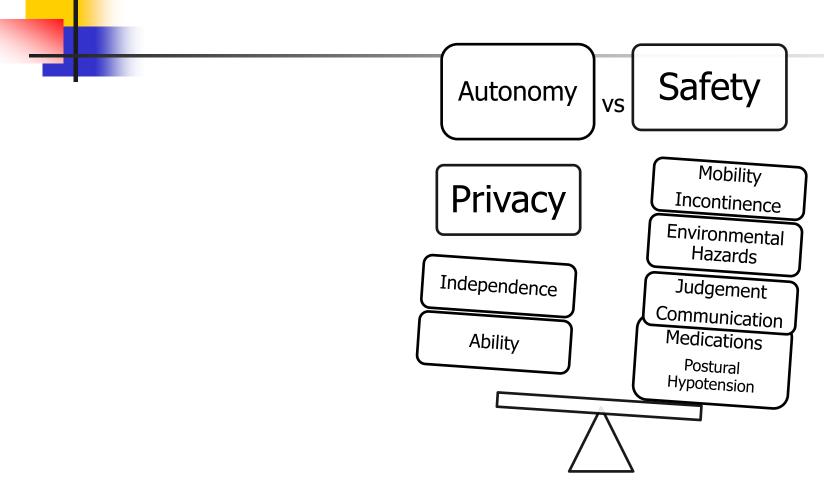


### Interaction Effect: Patient and Environment

# Fall prevention involves:

- Managing a patient's underlying fall risk factors, and
- Optimizing the physical design and environment safe mobility – individualized care planning
- Modified environment
- Scheduled, assisted toileting





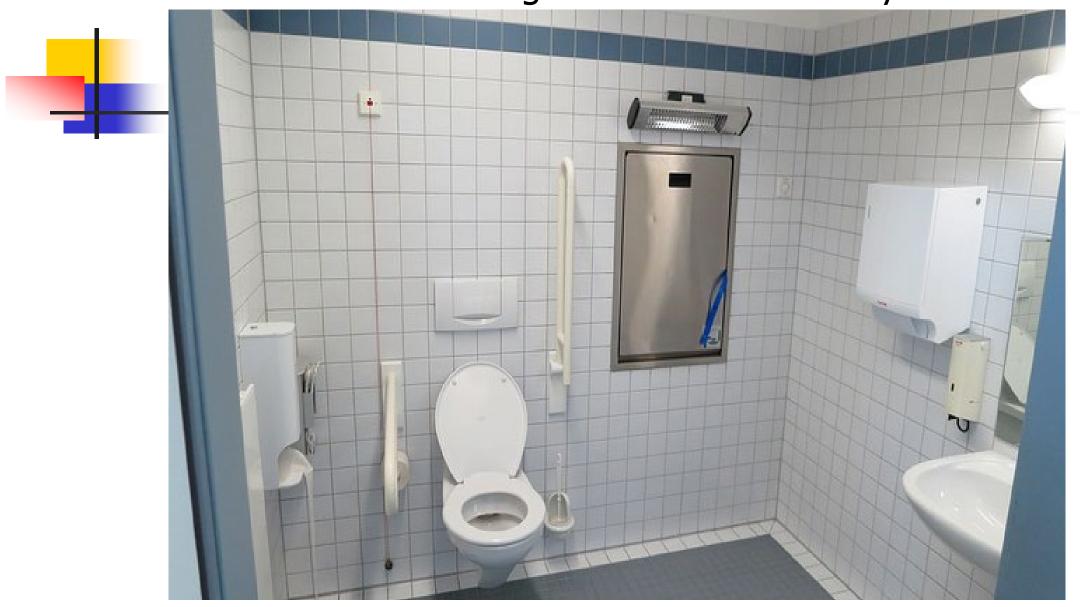
# Why Not This?



# WHAT'S THE MATTER WITH THIS?



#### Redesigned for Patient Safety





# Bathroom: SAFE DESIGN (2014)

• Minnesota Hospital Association, "Creating a Safe Environment to Prevent Toileting Related Falls Report" (2014) includes guidance for hospitals to create a safer environment that supports patient safety while accessing and using the toilet.

https://www.mnhospitals.org/Portals/0/Documents/ptsafety/falls/CreatingASafeEnvironmenttoPreventToiletingRelatedFallsReport.pdf

### MHA Finding

- Over the years of data review, 2010-2013, 40 percent of falls that resulted in serious harm or death involved toileting, including getting out of bed to go to the bathroom, falling on the way, or falling in the bathroom.
- So SAFE from FALLS program further enhanced to reflect knowledge related to preventing toileting-related falls.
- Implemented practice strategies (within arms' reach, hourly rounding, additional injury risk) impact leveled off.
- Commission research project to better inform environmental factors and generate recommendations for safer bathrooms. - 2014

# Curbell Medical, Inc. Toileting Solutions

#### **Wireless Motion Sensor**

- Will alarm to notify staff if the patient enters the toileting area unattended or can be position to be used when a patient is getting of the toilet without assistance
  - Cordless solution
  - Mounts to wall or can be set on a shelf
  - Replaces traditional toilet seat sensors
  - Aligned to Nurse Call Systems when paired with Curbell's BC600 monitor











### You Must Go Beyond Universal Approaches

- Universal approaches to patient toileting programs fail to address the unique toileting needs of each patient.
- Clinical practice standards require that nurses use clinical judgment to determine each patient's specific toileting needs and schedule.
- Nurses utilize clinical expertise to maximize each patient's functional ability to toilet and increase functional independence.



### Patient – Population Specific Toileting

- Reconsider the value of a scheduled toileting protocol for each patient.
- Discern which patient populations require a scheduled toileting retraining program and/or assistance for toileting:
  - Stroke patients (right vs. left brain stroke patients)
  - Those with lower extremity weakness;
  - Frail elders on diuretics
- Redesign a population-based approach
  - Post-op patients
  - Cognitively impaired vs. intact patients



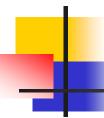
- Cognitive Status
  - Impaired
  - Visual Neglect (to the left or right visual field)
  - Confusion/Memory Deficits
- Altered Bladder Continence
  - Frequency, Urgency, Retention, Infection, Medications/Treatments [IVs, Diuretics]
- Altered Bowel Continence
  - Laxatives, Suppositories, Diarrhea, other

- Mobility Deficits
  - General Weakness (Level of Assistance: 1 or 2 person)
  - Gait Deficits (Shuffling Gait, Foot Drop)
  - Hemiparesis/Hemiplegia (Left-Side or Right-Side Weakness)
  - Balance Deficits (Sitting, Standing)
- Functional Level
  - Dependent
  - Weight Bearing
  - Caregiver Assistance



### Toileting: Dependent

- Toileting slings with dependent lifts
  - Larger access area
  - Different selection criteria than standard dependent slings
- Use of sit-stands for balance
- Consider caregiver access vs. patient access



### Toileting: Weight Bearing

- Standing and raising aids
  - Battery operated
  - Non-battery operated
- Considerations
  - Assistance to stand
  - Ability to access perineum for self hygiene
  - Ability to manage clothing up and down
  - Ability to get to and from the toilet

### Toileting: Caregiver Assistance

- Level of Assist (Min, Mod, Max 1 vs. 2 person)
- Mobility Aides: standing and raising aids: battery powered
  - Lift provides support while caregiver can provide hygiene
  - Some lifts allow patient to participate in hygiene
  - Patient still gets weight bearing
  - Patient can assist pulling to stand up some





- Toileting needs/schedules must be individualized.
- Safe toileting mobility requires that nurses have the physical assessment skills to evaluate a patient's ability to manage toileting.
- Physical assessment skills involve patient handling (i.e., transfers, ambulation, toileting) and activities of daily living tasks (i.e., clothing management, personal hygiene toileting, grooming) for individualized care planning.
- Each nurse must consider each patient's functional level of dependence/independence, weight-bearing status, need for caregiver assistance, additional fall risk factors (orthostasis, centrally acting medications, diuretics).

# Next Steps...

- What is universal? All care must be individualized! That includes toileting...bathroom safety
- Select 2-3 ideas for change
- Implement with commitment to succeed
- Keep track of your journey



But...You Can Change Your Care Management!

#### Thank You!

- See you on **July 19** for our follow-up coaching session please join me!
- Thank you for attending, be a champion for change, and keep me posted – I am here for you!
- pquigley1@tampabay.rr.com





# I Hope This Helps!



#### References

- ECRI Institute's Top 10 Patient Safety Concerns for Healthcare Organizations. 2014. Plymouth Meeting, PA: Publisher.. available online at https://www.ecri.org/2014hazards
- Ganz, D.A., Huang, C., Saliba, D., Shier, V., Berlowitz, D., Lukas, C.V., et al. (Jan. 2013). Preventing Falls in Hospitals: A Toolkit for Improving Quality of Care. Rockville, MD: Agency for Healthcare Research and Quality. AHRQ Publication No. 13-0015-EF.
- Inouye SK, Brown CJ, Tinetti, ME. Perspective: Medicare, nonpayment, hospital falls and unintended consequences. N Engl J Med. 2009 Jun 4;360(23):2390-3. DOI: 10.1056/NEJMp0900963

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- Hitcho, E.B., Krauss, M.J., Birge, S., Dunagam, W.C., Fischer, I., Johnson, S., Nast, P.A., Costantinou, E., & Fraser, V.J. (2004). Characteristics and circumstances of falls in a hospital setting. Journal of General Internal Medicine, 19(7), 732-739.
- Minnesota Hospital Association, the "Creating a Safe Environment to Prevent Toileting Related Falls Report" (2014)includes guidance for hospitals for creating a safer environment that supports patient safety while accessing and using the toilet.

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- WHO Integrated care for older people (ICOPE).
   Guidelines on community-living interventions to manage declines in intrinsic capacity. 2017

Available: <a href="https://www.who.int/ageing/health-systems/icope/evidence-centre/ICOPE-evidence-profile-urinary-incont.pdf">https://www.who.int/ageing/health-systems/icope/evidence-centre/ICOPE-evidence-profile-urinary-incont.pdf</a>

### **Next Steps**

Join us for our next Coaching call: July 19, 2023, 2-3 pm EST

Falls series recording and slides: <a href="https://qi.ipro.org/2023/04/19/fall-and-injury-prevention-a-6-part-webinar-series/">https://qi.ipro.org/2023/04/19/fall-and-injury-prevention-a-6-part-webinar-series/</a>



#### Thank You for Attending Today's Event

We value your input!

Please complete the brief survey after exiting event.

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