Research addressing barriers to care implementation and quality improvement

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Disclosures

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• None
Significance

• UI is viewed as a geriatric public health issue due to its prevalence, association with co-morbidities, costliness, and effect on quality of life.

• UI is under-recognized, under-reported, and under-treated.

• Effective treatment is available for the elderly, including the frail elderly.

• Vast amounts of regulatory, research, and clinical efforts are expended to improve continence care.
Significance: Long-term care

Centers for Medicare and Medicaid Services (CMS) Tag F315 states, “A resident who enters the facility without an indwelling catheter is not catheterized unless the resident’s clinical condition demonstrates that catheterization was necessary and a resident who is incontinent of bladder receives appropriate treatment and services to prevent urinary tract infections and to restore as much as normal bladder function as possible.”
Tag F315: Severity Level Deficiencies

- Severity Level 1: No actual harm with potential for minimal harm. [*Severity Level 1 does not apply for this regulatory requirement.*]
- Severity Level 2: No actual harm with a potential for more than minimal harm that is not immediate jeopardy.
- Severity Level 3: Actual harm that is not immediate jeopardy: carries fines.
- Severity Level 4: Immediate jeopardy to resident health or safety: carries fines.

Other tags related to UI: comprehensive assessment and care plans, quality of care, proficiency of nurses aides, and dignity.
Significance: Risk factors** for Incident Urinary Incontinence in Hospitalized Elders

<table>
<thead>
<tr>
<th>Risk Factor</th>
<th>OR(95% CIs)</th>
<th>p-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continence aids (reference: self-toileting)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Urinary catheter</td>
<td>4.26 (1.53–11.83)</td>
<td>0.005</td>
</tr>
<tr>
<td>• Adult diaper</td>
<td>2.62 (1.17–5.87)</td>
<td>0.02</td>
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<tr>
<td>Activities of daily living at admission (reference: independent)</td>
<td></td>
<td></td>
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<tr>
<td>• Partially dependent</td>
<td>2.96 (1.01–8.71)</td>
<td>0.049</td>
</tr>
<tr>
<td>• Dependent</td>
<td>3.27 (1.49–7.15)</td>
<td>0.003</td>
</tr>
</tbody>
</table>

** Adjusted for age, cognitive status, physical activity

Source: Zisberg et al., JAGS, 2011.
Significance: Dignity

“Dignity is as essential to human life as water, food, and oxygen. ... The loss of it can carry off a man as surely as thirst, hunger, exposure, and asphyxiation, and with greater cruelty.”

Laura Hillenbrand: Unbroken. A World War II Story of Resilience and Redemption
State-of-the-Art Knowledge

Behavioral interventions developed and tested in 1980s and 1990s

• Timed toileting: no empirical evidence for or against (Ostaszkiewicz et al., 2004)

• Habit retraining: insufficient evidence of an effect on continence outcomes (Ostaszkiewicz et al., 2004)

• Bladder retraining: trials tended to favor bladder retraining; no evidence of adverse effects (Wallace et al., 2004)

• Prompted voiding: evidence of increasing self-initiated toileting and decreased incontinence episodes (Eustice et al., 2000)
Residents with Bladder Incontinence
Residents with Bladder Training Program
Facilities with Deficiencies

Ratings of states of functional debility relative to death by patients in hospital with serious illnesses*, %

<table>
<thead>
<tr>
<th>Compared with death</th>
<th>WORSE</th>
<th>SIMILAR</th>
<th>LITTLE BETTER</th>
<th>SOMewhat BETTER</th>
<th>MUCH BETTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bowel and bladder incontinence</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Rely on breathing machine to live</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cannot get out of bed</td>
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<tr>
<td>Confused all the time</td>
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<tr>
<td>Need care all the time</td>
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<tr>
<td>Rely on feeding tube to live</td>
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<tr>
<td>Live in a nursing home</td>
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<tr>
<td>At home all day</td>
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<tr>
<td>Moderate pain all the time</td>
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<tr>
<td>In a wheelchair</td>
<td></td>
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</table>

Source: JAMA Internal Medicine

*Survey conducted July 1st 2015 to March 7th 2016, Philadelphia, United States
State of the Art Knowledge: Clinical Practice Guidelines


Six evidenced-base guidelines for adults aged 65 years and over meeting the 2013 criteria for inclusion are listed in National Guideline Clearinghouse, guideline.gov.
State of the Art Knowledge: Care Implementation and QI models

Make it happen, Let it happen, Help it happen

• Urgency
  
  *Disrupt the routine with firm change intentions*

• Solidarity
  
  *Common and worthwhile goals perceived by all*

• Intensity
  
  *Distinguish between the before and after – intense period of oversight*

• Accumulation
  
  *Cumulative and incremental gains in experience used to build foundation to sustaining the change*

Source: Etheridge et al., 2014
## State of the Art Knowledge: Barriers

<table>
<thead>
<tr>
<th>Individual Factors</th>
<th>Clinician Factors</th>
<th>Organizational Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>High tolerance for symptoms(^1)</td>
<td>Focus on containment(^1)</td>
<td>Staff ratios(^2)</td>
</tr>
<tr>
<td>Perceptions: aging, staff unwillingness to help(^1)</td>
<td>Lack of staff information re urinary incontinence(^1)</td>
<td>Location (urban versus rural)(^2)</td>
</tr>
<tr>
<td>Preference for urine containment(^1)</td>
<td>Stigmatizing nature of work(^3)</td>
<td>Commitment from the top(^4)</td>
</tr>
<tr>
<td>Transportation to healthcare settings(^1)</td>
<td>Low priority(^4)</td>
<td>Support &amp; training(^4)</td>
</tr>
</tbody>
</table>

1. French et al., 2016  
2. Yoon et al., 2012  
3. Ostaszkiewicz et al., 2016  
4. Cheater, 2009
Knowledge Gaps

• Are healthcare providers using published guidelines for care and quality improvement in all healthcare settings?

• Do we have the right measurement tools and the right patient, clinical, and organizational outcomes?

• Are there setting-specific barriers to continence care implementation in acute care, long-term care, and community settings?

• What do older adults think are barriers to receiving satisfactory continence care?

• What do older adults want regarding continence care implementation?
Knowledge Gaps

• What are the short-term and long-term treatment effects of absorbent products used to contain urine?

• What levels of knowledge and clinical competency are required to deliver evidence-based continence care?

• What individual, team, and organizational resources are needed to sustain changes in continence care?

• How will we know we succeeded?
Research Opportunities

• Remove the “sense of sluggishness” (Etheridge et al., 2014).
  Recognizing reality: current and future needs.
  Shifting our perspective towards prevention.
  Questioning relevancy of current behavioral interventions.

• Create new partnerships
  Architects, urban planners, consumer groups, formal and informal caregivers, biomedical engineers, information and technology specialists, robotics, organizational researchers

• Test multi-level, multi-stage, and multi-site interventions for specific outcomes
Research Opportunities: Develop and test interventions ...

... by using value proposition as a framework for evidence-based continence care for all frail older persons by:

- Creating a sense of urgency
- Creating a guiding coalition
- Developing a vision and strategy
- Communicating the change vision
- Empowering broad-based action
- Generating short-term wins
- Consolidating gains and producing more change
- Anchoring new approaches in the culture