The natural history of the urinary catheter in the community

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“The chains of habit are too weak to be felt until they are too strong to be broken”

Samuel Johnson
The problem with urinary catheters

Urinary Tract Infections account for 17.2% of Healthcare Associated Infections

UTIs second most prevalent HCAI in England (HPA, 2012)

Patients at particular risk of acquiring a UTI are those with indwelling urinary catheters (Loveday et al, 2014)

Duration of catheterisation further augments the increased risk of infection (Gould et al, 2009)
The patient journey poses problems too..

- Increasingly elderly population
- Emphasis on provision of healthcare in the community
- Multiple care episodes and multiple providers
Community hospitals x 3:
  • Total x6 inpatient wards
  • Speciality: Elderly care rehabilitation

District Nursing Teams
Specialist Community Nurses
Physiotherapists and OTs

Collaborative working: social care, local acute trusts, other community healthcare providers
Community Hospitals
• Review of patient notes on 3 inpatient wards, spread across each of the 3 Community Hospitals

District Nursing Caseload
• Review of patient notes from a random sample of catheterised patients

4 key questions
Summary of Findings

- Local prevalence of urinary catheters 20%
  In line with national average 15-25%  
  (Loveday et al, 2014)

- Average length of catheterisation 30.5 days

- More than 50% had no appropriate or justifiable reason for being in situ

- 66% of patients had developed a catheter associated UTI during this period
### Results: Community Hospitals

<table>
<thead>
<tr>
<th>Pt</th>
<th>Indication for IDC</th>
<th>Location where IDC inserted</th>
<th>Duration of catheterisation</th>
<th>Regularity of review</th>
<th>Plan for removal or pro-active mgmt</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ca prostate w/ urethral stricture</td>
<td>Not documented</td>
<td>37 days</td>
<td>Weekly</td>
<td>Catheter removal date in notes</td>
</tr>
<tr>
<td></td>
<td>Monitoring urine output (during acute illness)</td>
<td>Acute hospital</td>
<td>35 days</td>
<td>Weekly</td>
<td>Nil</td>
</tr>
<tr>
<td>2</td>
<td>‘Long term’</td>
<td>Acute hospital</td>
<td>43 days (since last re-insertion)</td>
<td>Daily- nursing staff only</td>
<td>Nil</td>
</tr>
<tr>
<td>3</td>
<td>Not explicitly stated but CH medical assessment of catheter rationale: Poor mobility</td>
<td>Not documented</td>
<td>Not documented</td>
<td>None documented</td>
<td>Nil</td>
</tr>
<tr>
<td>4</td>
<td>Retention (not specified chronic or acute)</td>
<td>Acute hospital</td>
<td>21 days</td>
<td>Every 2-3 days by nursing staff</td>
<td>Nurses planned TWOC</td>
</tr>
<tr>
<td>5</td>
<td>Retention (not specified chronic or acute)</td>
<td>Acute hospital</td>
<td>68 days (since last re-insertion)</td>
<td>Every 2-3 days by nursing staff</td>
<td>Date of next catheter change documented</td>
</tr>
<tr>
<td>6</td>
<td>Retention (not specified chronic or acute)</td>
<td>Community Hospital</td>
<td>10 days</td>
<td>1 x in 4 days</td>
<td>Date of next catheter change documented in 3 months</td>
</tr>
<tr>
<td>7</td>
<td>Retention (not specified chronic or acute)</td>
<td>Acute hospital</td>
<td>34 days (since last re-insertion)</td>
<td>None documented</td>
<td>Urology Referral</td>
</tr>
<tr>
<td>8</td>
<td>Retention (not specified chronic or acute)</td>
<td>Acute hospital</td>
<td>17 days</td>
<td>None documented</td>
<td>Pt constipated; TWOC when ‘regular again’</td>
</tr>
</tbody>
</table>

**Notes:**
- Pt constipated: TWOC when ‘regular again’
## Results: District Nursing Caseload

<table>
<thead>
<tr>
<th>Pt</th>
<th>Purpose of catheter derived from notes</th>
<th>Valid rationale against local IDC guidance</th>
<th>Main problems with each catheter</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Long term: MS</td>
<td>Y</td>
<td>Urethral catheter in situ, as patient has health belief that Supra pubic catheter more likely to become infected, despite education efforts of DNs</td>
</tr>
<tr>
<td>2</td>
<td>Failed TWOC x 2 in acute hospital (No mention of retention)</td>
<td>N</td>
<td>Patient mobile and independent. No evidence of referral for investigation of failed TWOCs No recommendation for TWOC in community</td>
</tr>
<tr>
<td>3</td>
<td>'Incontinence'</td>
<td>N</td>
<td>Pads insufficient to contain incontinence problem. Poor cognitive function - has pulled urinary catheter out x 2 Bypassing with catheter in, requires pads for overflow urine</td>
</tr>
<tr>
<td>4</td>
<td>Acute retention (secondary to UTI)</td>
<td>Y</td>
<td>Patient failed TWOC Experienced multiple UTIs whilst catheterised - CSU grew resistant bacteria No urology referral</td>
</tr>
<tr>
<td>5</td>
<td>'long term'</td>
<td>N</td>
<td>Catheterised by urology, no recommendation for re-catheterisation in community No other documented rationale for catheter</td>
</tr>
<tr>
<td>6</td>
<td>Chronic retention (without prior history)</td>
<td>Y</td>
<td>No mention of acute or chronic retention prior. No details re Urology referral or TWOCs for investigation of problem</td>
</tr>
<tr>
<td>7</td>
<td>Long term catheter for incontinence</td>
<td>N</td>
<td>After several months patient has bypassing catheter requires catheter change every 2 weeks, including SOS calls +++ Also requires pads for overflow urine.</td>
</tr>
<tr>
<td>8</td>
<td>Long term- supra pubic</td>
<td>Y</td>
<td>Bypassing regularly</td>
</tr>
</tbody>
</table>
Incidental & anecdotal evidence

• Patients reported they wanted to keep the catheter as they were afraid of ‘having accidents’

• Relatives were keen for these catheters to remain as this was thought to ‘be convenient’ for ongoing care

• Nursing and medical staff unaware of the consequences of ongoing catheterisation- including blood stream infections
Poor communication with the acute hospitals
  - Handwritten faxed referrals only
Patients switching between healthcare providers
Lack of necessary information for clinical decision making
Care episodes cleared from mobile working system after 5 visits
Difficulty of undefined referral process to Urology
District and Community Nurses agreed there was a big problem with inappropriate catheters in the community.

They were all really keen to tell me all about it.

They really want to do something about the problem.
And bad things...

• Felt their **hands were tied** in deciding about care and removal of catheters

• Identified significant factors affecting this:
  • Lack of communication from acute hospital, both written and verbal
  • Written referrals offered minimal clinical information,
  • Catheters often discovered as ‘incidental’ during visit
The Improvement Plan

Process mapping to achieve quality improvement
Contacts and Organisation

District Nurses

BUT...
Continence Nurses 30 miles away

AND
Quality Lead 30 miles in the other direction!
Other stakeholders involved in process mapping

• Clinical Community Lead Nurse and Quality Lead were content for me to talk to staff but not interested in ‘the details’
  • ‘Manager’ of the ‘doers’
  • Too busy with the ‘real work’ 😞

• Continence Nurses:
  • New links forged! 😊
  • Role understanding
  • Common concerns re TWOC best practice
  • Variable offer of support for improvement interventions in the future
Plan

1. Catheter Passports
2. Communication Review
3. TWOC Best Practice
4. Enhanced Support
Final thoughts
Did you spot the catheters?
Thank you