

Conservative Management Award

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Murphy C¹, Prieto J¹, Fader M¹

1. University of Southampton

UNDERSTANDING WHY CLINICIANS MAKE THE DECISION TO PLACE A URINARY CATHETER IN ACUTE MEDICAL CARE

Hypothesis / aims of study

Indwelling urethral catheters (IUCs) placed for short-term use in hospital frequently become long-term catheters, increasing the potential for infections, trauma and other catheter complications⁽¹⁾. Measuring overuse is difficult due to lack of agreement in the literature on when an IUC is clinically indicated⁽²⁾. Furthermore, little is known about why clinicians place IUCs in acute medical care. Without this knowledge, the effectiveness of strategies aimed at reducing IUC use, such as introducing new guidelines or asking clinicians to consider all alternatives prior to placing an IUC, is likely to be sub-optimal. Therefore, the aim of this study is analyse why clinicians make the decision to place IUCs in acute medical care.

Study design, materials and methods

30 retrospective think aloud interviews and 20 semi-structured interviews were completed in the emergency department, medical assessment unit, older people's medicine and stroke wards and cardiology wards. The majority (22 out of 30) of the interviews were with junior, mid-level and senior physicians. The remaining 8 interviews were with senior and staff nurses.

Results

Four key reasons were given for IUC use and for each one there was variation in clinicians' beliefs about when IUCs were indicated.

- Acute Urinary Retention: There was substantial uncertainty over when an IUC should be used to relieve retention. Clinicians reported that they feared missing a patient in retention and would be "twitched" to get an IUC in place. One clinician stated that he had placed an IUC in a patient with 100mls of urine in their bladder and left the device in situ whereas others reported waiting until a scanner showed at least 500mls of urine.
- Monitoring urine output: Often a knee-jerk or routine decision, given little thought. One senior physician in the emergency department reported asking for IUCs to be placed because he did not want to miss a "single precious drop" whereas a nurse in the emergency department stated that "If a patient's difficult to catheterise they sometimes say oh don't bother we don't really need it and you think either she does or she doesn't."
- Skin Protection: Opinions were strongly held, but diverse. Some clinicians stated that they would use an IUC to protect skin that was intact but fragile, others believed that the use of an IUC to prevent or manage skin damage was not necessary under any circumstances.
- Managing Urinary Incontinence: Often, patients who had IUCs placed to manage urinary incontinence were generally continent, but had been admitted with acute illness and had lost the ability to be independent with their toileting needs. The IUC's were being placed for comfort and dignity reasons and to help them adapt to a situation that was assumed to be temporary. However, many clinicians disagreed with this stance and stated that IUCs should not be used to manage urinary incontinence in any circumstances, except end of life care.

Whatever the reason for placing an IUC, there were some cross-cutting themes that influenced many decisions, including

- Clinical Environment: Particularly whether the department had a long-term or short-term focus. For all indications, clinicians in the emergency department were more likely to place an IUC when compared to the older people's medicine wards.
- Patient Age and Gender: Older patients were more likely to receive an IUC due to assumptions made about physical and cognitive ability. Clinicians avoided placing IUCs with younger patients where possible. Women were seen as more likely to receive an IUC, partly due to the lack of nurses trained to catheterise men.
- Perception of risk: Some clinicians said they do not consider the risks when making the decision to place an IUC. Others acknowledged that their beliefs on the impact of IUCs (including infection, increase length of hospital stay, trauma and distress and restricting mobility) strongly influenced their decision making. Conversely, IUCs were used to avoid risk, for example, to avoid missing retention if staffing levels were low.
- Resource availability: Most clinicians acknowledged that avoiding the use of IUCs increased nursing workload and this influenced IUC decision making. Junior physicians also used IUCs to ease workload, for example, one junior physician stated "I'm less likely to get in trouble putting one in than not putting one in". The availability of resources such as continence pads, catheter alternatives and bladder scanners was also influential.

Interpretation of results

Clinicians have widely varying beliefs regarding the use of IUCs in acute medical care. This was anticipated as the evidence supporting the use of IUCs for each indication is weak. Clinicians combine these beliefs with cues from the clinical situation (patients factors, perceived risk, clinical environment, resource availability) to make sense of the decision to place a device. It was found that IUCs were used to 'Make life easier' and to 'Avoid contingencies' for both clinicians and patients.

Interventions to reduce IUC use such as asking clinicians to consider all alternatives before using an IUC or introducing a checklist of appropriate indications are unlikely to have a long-term impact on clinical behaviour unless the underlying beliefs are addressed.

Concluding message

Clinical reasoning in this area is frequently inconsistent. IUC placement decisions vary widely indicating that there is considerable scope for the reduction of use. The processes used by clinicians to make sense of the decision to place an IUC need to be

understood and interrupted for IUC reduction initiatives to achieve maximum impact. Better understanding of when the benefits of IUCs outweigh the risks is needed to inform the development of IUC reduction strategies.

References

1. McNulty C (2009) Reducing urinary catheter related infections in care homes: a review of the literature. *Journal of Infection Prevention* 10(2):70-75
2. Murphy C, Fader M, Prieto J. (2014) Interventions to minimise the initial use of indwelling urinary catheters in acute care: a systematic review. *International Journal of Nursing Studies* Jan;51(1):4-13

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