

## St Helens and Knowsley Teaching Hospitals NHS Trust: Catheter Infection Improvement Project\*

At St Helens and Knowsley Teaching Hospitals NHS Trust, Senior Nurse, Lisa Sams, and Infection Control Nurse Specialist, Julie Grimes, are leading a catheter infection improvement project that has coincided with the introduction of the BARD® Comprehensive Care Foley Tray, an All in One catheterisation system. The aim of the project was to further reduce catheter-associated urinary tract infection (CAUTI) rates, and the results have exceeded all expectations.

In 2011, an audit took place to test all catheterised patients in the Trust on one day, with results showing a CAUTI rate of 6%.<sup>1</sup> Although 6% is below the national average, the ultimate target is an infection rate of close to zero. Therefore, the team started with an initial goal to halve the Trust's CAUTI rate from 6% in the 2011 audit, to 3% in 2012 and then continue to reduce the infection rate further.

As part of the project, the Trust continued to develop nurses through education and training. Sessions were facilitated to inform staff regarding the BARD® Comprehensive Care Foley Tray, and the Trust implemented the Urinary Catheter Assessment and Monitoring form (UCAM; originally developed at Winchester and Eastleigh Healthcare NHS Trust and adapted for St Helens and Knowsley Teaching Hospitals NHS Trust). The UCAM form is used to track patients who have had catheters inserted, providing patients with the assurance of receiving on-going catheter care, with monitoring checks 3 times daily.

The All in One BARD® Comprehensive Care Foley Tray was introduced to wards in July 2011 and nurse feedback about the product was immediately positive as they embraced the change of products to improve patient care and provide standardisation across the Trust.

The project aimed to continue the improvement of catheterisation competency assessment training. Courses completed throughout 2012

enhanced staff skills and knowledge and assisted in the maintenance and reduction of infection in patients.

Following implementation of these additional measures; the UCAM documentation, competency assessment training and education, and the introduction of BARD® Comprehensive Care Foley Tray, measurement and monitoring the improvements has been embedded into the Trust's monthly Infection Prevention and Control audits.

UCAM Form

Results from February 2012 audit data show that St Helens and Knowsley Teaching Hospitals NHS Trust has achieved a marked reduction in CAUTI rates from 6% to 1.1%. In addition, the most up-to-date safety thermometer<sup>2</sup> monthly audit data for the Trust also supports evidence of a reduced CAUTI, which indicates that less than 1% of patients develop a CAUTI whilst in hospital.

Lisa Sams, said: "This project has been a huge success, reducing infection rates and further improving training, promoting best practice across the Trust."



Staff involved in the project are keen to share their knowledge and experience with local and national teams to promote a reduction in CAUTIs.

\* Catheter Infection Improvement Project

Caption: Lisa Sams, Senior Nurse, Nursing Development and Julie Grimes, Infection Prevention and Control Nurse Specialist use the BARD® Comprehensive Care Foley Tray

References  
1. Data on file - St Helens & Knowsley Teaching Hospitals NHS Trust  
2. NHS Safety Thermometer. [www.ic.nhs.uk/services/nhs-safety-thermometer](http://www.ic.nhs.uk/services/nhs-safety-thermometer) (last accessed 11/12/2012)

The opinions and clinical experiences presented herein are for informational purposes only. The results from these case studies may not be predictive for all patients. Individual results may vary depending on a variety of patient specific attributes.

Please consult product labels and inserts for any indications, contraindications, hazards, warnings, cautions and directions for use.



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## The All in One BARD® Comprehensive Care Foley Tray In Action

BARD® offers an extensive portfolio of catheters, including the All in One BARD® Comprehensive Care Foley Tray. The All in One Tray provides the essential items required for a catheterisation or recatheterisation procedure and is designed to support the drive to reduce catheter associated urinary tract infections (CAUTIs) through encouraging best practice and standardising the care pathway.



In this newsletter we share the experiences of some valued Bard customers using the All in One Tray. The case studies document the work of three NHS Trusts in the UK, each at different implementation stages - to further reduce CAUTI rates. By capturing the knowledge and practices of NHS staff at ward and board levels, these three case

studies highlight how the All in One BARD® Comprehensive Care Foley Tray can meet the needs of different Trusts. In addition, this portfolio of experience indicates that, when combined with appropriate staff training and continuing evaluation initiatives, the All in One Tray supports a standardisation of care which may contribute to reductions in CAUTIs.



## Targeting CAUTIs at Nottingham University Hospitals NHS Trust: The Small Changes, Big Impact Programme\*

Catheter-associated urinary tract infections (CAUTIs) cause discomfort to patients, increase length of hospitalisation and are costly for the NHS.<sup>1</sup> Although infection control protocols are generally well established in UK hospitals, a greater focus is needed on reducing specific infections such as CAUTIs. In Scotland, for example, it has been reported UTI's account for 39% of non-acute hospital-acquired infections.<sup>2</sup>

At Nottingham University Hospitals NHS Trust, Clinical Nurse Specialist and Team Leader for Continence, Amy Cartwright, is leading a new initiative to reduce the number of CAUTIs. The hospitals 2011 Urinary Catheterisation audit revealed the need to improve staff knowledge and practice.<sup>3</sup> This need is supported by the Trust's Commissioning for Quality and Innovation (CQUIN) goals<sup>4</sup> and the Department of Health's High Impact Action for Nursing and Midwifery, Protection from Infection – urinary tract infections.<sup>1</sup> With funding from a Winston Churchill Memorial Trust Fellowship, Amy travelled to the USA to research CAUTI rate reduction initiatives in US hospitals. Based on her findings, the Trust developed the 'Small Changes, Big Impact' programme that was implemented in early 2013.

### Small Changes, Big Impact Programme

#### Raising awareness:

Amy's proactive attitude has gained her the reputation of a champion in CAUTI reduction at the Nottingham University Hospitals NHS Trust. She started by sharing the audit data at board and ward level and raised awareness through ad hoc, informal training sessions on the wards. Working with the procurement manager, Amy is driving the move from low-cost catheters to the All in One BARD® Comprehensive Care Foley Tray, which is widely used in the USA. The Trust recognises the potential for fewer infections and long-term savings with this All in One tray – as well as improved patient satisfaction.

#### Implementation:

Amy has taken many ideas from the USA, where better catheter care became a focus after the introduction of the 'no pay for errors' policy by the US government's Medicare service in 2008.<sup>5</sup> This policy means that the costs associated with treating, among other healthcare-associated conditions, CAUTIs are no longer reimbursed by Medicare. Based largely on the toolkit used in US hospitals, the Small Changes, Big Impact programme will start a culture change to empower nurses to lead on catheter insertion, catheter care and regular reviews of catheter status. The programme will also ensure that catheter practice is standardised throughout the trust.

#### Toolkit

In 2013, the full implementation 'toolkit' strategy will be rolled out at Nottingham University Hospital NHS Trust. The toolkit includes communication and training strategies to improve practice.

#### Handover documentation:

- A new column has been introduced in handover notes to highlight whether a patient has a catheter or not, making catheterisation one of the four main questions when evaluating a patient (risk of pressure ulcers, risk of falls, nutrition and catheterisation status).

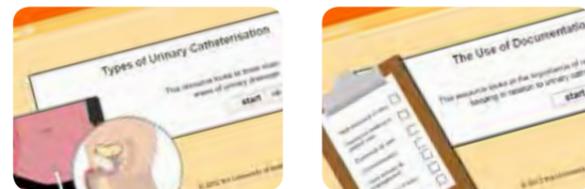
\* The Small Changes, Big Impact Programme

#### References

1. Department of Health. High Impact Actions for Nursing and Midwifery: Protection from Infection – urinary tract infections. [www.institute.nhs.uk/images/documents/BuildingCapability/HIA/8.Protection%20from%20infection.pdf](http://www.institute.nhs.uk/images/documents/BuildingCapability/HIA/8.Protection%20from%20infection.pdf)
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#### Training and competencies:

- Catheter insertion techniques and staff competency is assessed annually at the Porter Adventist Hospital, Denver, USA, whereas in the UK, the Royal College of Nursing recommends a formal update at least every five years.<sup>6</sup> In the USA, hands-on training workshops and skill fairs to actively involve nurses are also available. Nottingham University Hospitals NHS Trust aims to implement these training techniques in the future.
- An e-learning package, consisting of eight modules, has been designed with the intention to deliver 'bite-size' information to improve current practice and patient safety during catheterisation. This e-learning package has already received positive feedback from healthcare professionals involved in continence care.



Example e-learning package screens

- In addition, CAUTI prevention and catheter care has been introduced as part of the healthcare assistant (HCA) induction course at Nottingham. This is a three-week training course for newly employed HCAs, and training is also provided for those already working on the wards. Part of this course covers urinary catheter care.

#### Evaluation:

The effectiveness of the programme will be evaluated by:

- Repeat audits by the Trust, with the initial audit used as a bench-mark to identify improvements.
- A nursing dashboard survey (a national monthly survey, which includes urinary catheter management).
- The 'Essence of Care' benchmark scheme – which includes bladder, bowel and continence care.

#### Sharing knowledge:

Amy is dedicated to improving patient safety and recognises the importance of sharing best practice. To inform healthcare professionals and managers about the success of the programme, the results will be published at the end of 2013 and a poster designed to share the results both within and outside the Trust. Amy will also use networking opportunities to communicate her findings and hopes that sharing this knowledge will lead to an important change in culture, a better experience and improved outcomes for patients, and less financial burden for hospitals throughout the UK.

## Lancashire Teaching Hospitals NHS Foundation Trust: Spotlight on Catheter Care\*

Lancashire Teaching Hospitals (LTH) NHS Foundation Trust has embraced the Department of Health's High Impact Action for Nursing and Midwifery Protection from Infection – urinary tract infections<sup>1</sup> and the Commissioning for Quality and Innovation (CQUIN) initiatives<sup>2</sup> and is determined to improve patient safety. One area of focus is catheter care and the reduction of catheter-associated urinary tract infections (CAUTIs). In 2010, a point prevalence audit at the trust revealed a catheterisation rate of 17% and a CAUTI rate of 3%.<sup>3</sup> Although below the national average of 7.3%,<sup>1</sup> the infection control team wanted to further reduce the CAUTI figures. Claire Horsfield, Head of Patient Safety at the trust, works with the infection control team to identify any issues and devise effective plans to address CAUTIs.

#### The Plan

- Introduce the All in One BARD® Comprehensive Care Foley Tray: an All in One catheterisation tray.
- Involve Bard Medical facilitators to establish the tray, including the 'BARD® study day'.
- Introduce an educational 'grab pack', containing ten key messages on catheter care, use of the BARD® Comprehensive Care Foley Tray and high impact interventions.
- Update the Urinary Catheter Assessment and Monitoring (UCAM) form to enhance the documentation of catheter care.
- Work across the Trust to standardise practice.
- Develop a 'catheter passport' for all catheterised patients.

A Trustwide survey conducted before the introduction of the BARD® Comprehensive Care Foley Tray revealed a wide range of different catheters in use. The decision was, therefore, taken to standardise to the BARD® Comprehensive Care Foley Tray with male catheters (except for the urology department and special cases). Before and after implementation of the plan, the Trust also circulated a questionnaire on staff knowledge about catheter care. The completed questionnaires highlighted the improvement in knowledge after implementation: the rate of correct answers rose from 69% in 2011 to 77% in 2012.<sup>3</sup>

Although clinical staff performing catheterisation are required to take a competency test, a 'grab pack' was designed to ensure their training needs were being fully met. This pack prepared the infection control and patient safety team to 'grab' staff in the clinical area for ten-minute training sessions. The UCAM form was also updated to improve documentation and now includes all the necessary details about catheter care, including date of catheter insertion, use of aseptic non-touch technique (ANTT®), appropriate drainage bag placement and the reason for the catheter's ongoing use.

\* Spotlight on Catheter Care

#### References

1. Department of Health. High Impact Actions for Nursing and Midwifery: Protection from Infection – urinary tract infections. [www.institute.nhs.uk/images/documents/BuildingCapability/HIA/8.Protection%20from%20infection.pdf](http://www.institute.nhs.uk/images/documents/BuildingCapability/HIA/8.Protection%20from%20infection.pdf)
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The team has introduced these changes in the community too, where the UCAM form and passport are also in use. The passport, which was jointly designed with BARD® and stays with the patient, details vital information (for example, the reason for catheterisation and the date of catheterisation).

#### Outcomes

The All in One BARD® Comprehensive Care Foley Tray has been generally well received by staff, and the benefits of the plan have been seen both in the hospital and the community setting, with no increase in costs to the Trust. Table 1 presents the infection rate and number of catheterised patients pre- and post-introduction of the tray.



Table 1. Lancashire Teaching Hospitals NHS Foundation Trust – urinary tract infection and catheterisation rates<sup>3</sup>

	2010: pre-introduction of BARD® Comprehensive Care Foley Tray*	2012: post-introduction of BARD® Comprehensive Care Foley Tray**
Urinary tract infection	3%	1.9%
Catheterised patients	17%	17.6%

\* Data from a point prevalence audit in November 2010

\*\* Data from a point prevalence audit in November 2012

Monthly audits of the UCAM forms are being conducted in all clinical areas and a point prevalence audit is conducted annually. Link nurses for catheter care have been identified and are overseeing the practice.

#### Future Initiatives

The trust recognises that nurses are often best placed to monitor and record catheter care. Following a national pilot led by the Infection Prevention Society, HOUDINI<sup>4</sup> – a urinary catheter removal protocol that aims to reduce the number of days of catheter usage – has been introduced at the Trust. It is expected that HOUDINI may lead to even better documentation and a reduction in catheter in situ time.

#### Sharing knowledge

As Head of Patient Safety, Claire is in an ideal position to push forward infection control initiatives. She is pleased to share the experience at Lancashire Teaching Hospitals NHS Foundation Trust and hopes it will encourage other trusts to review their catheter practice and consider the benefits of implementing the BARD® Comprehensive Care Foley Tray.