

Establishing the Southwest Catheter Skills Course – a closed loop quality improvement project

BY SHWETAMBRA VYTHIALINGAM, JAIME CHAN, TOM-ABDUL MUNDY MALIK AND MAHMOUD SROUR

The General Medical Council states that foundation year doctors should be able to carry out male and female urethral catheterisation safely under direct supervision [1]. A 2014 survey of medical students demonstrated that 40% and 64% had never performed male and female catheterisation respectively [2]. Anecdotal evidence among urologists in the Southwest region supported the study's finding that undergraduates and foundation doctors lack confidence in basic urology skills.

To address this, we designed a regional catheter skills course aimed at junior hospital doctors from a variety of specialties. The course was delivered across two trusts in the Southwest region between November 2023 and February 2024. We measured course quality using a closed loop quality improvement methodology.

A four-hour catheter skills course was designed, with whole group lectures on theoretical principles followed by four small group practical stations. The practical stations covered urethral catheterisation in males and females, troubleshooting blocked catheters, bladder washout and suprapubic catheter (SPC) change. These skills were simulated utilising mannequins and real-world catheter equipment. Delegates completed pre- and post-course questionnaires, grading their confidence in performing each skill on a five-point Likert scale. Mean confidence data were analysed from the questionnaires to assess the efficacy of the course in achieving improved junior doctor confidence. Delegates were also given the opportunity to offer feedback about course quality in order to ensure that future iterations were improved to address delegate learning needs. The first course was held in November 2023 at the Great Western Hospital in Swindon. The second was delivered at Cheltenham General Hospital in February 2024.

A total of 25 delegates attended the two courses. Both courses were significantly over-subscribed, suggesting that there is a real demand among junior doctors to learn fundamental catheter skills. Questionnaire data from both centres demonstrated improved confidence in performing each of the four skills following course completion. The greatest increase in confidence in both courses was seen for SPC change, suggesting that junior doctors would



Second catheter skills course at Cheltenham General Hospital in February 2024.

gain most benefit from education in this area. Following feedback from the first course, we ensured a larger space and greater variety of demonstration catheters for the second iteration. This was associated with an increase in delegate satisfaction with organisation and teaching quality.

Moving forward, our team aims to deliver the course biannually across centres in the Southwest region. We aim to include a skills station covering troubleshooting blocked nephrostomies. This work will continue to be supported by our quality improvement methodology to ensure that the learning needs of delegates are met with a high standard of teaching.

References

1. General Medical Council. Outcomes for graduates – Practical skills and procedures. <https://www.gmc-uk.org/education/standards-guidance-and-curricula/standards-and-outcomes/outcomes-for-graduates> [accessed 18 July 2024].
2. Forsythe R, Eylert M. Medical students and foundation doctors need more exposure to basic urology. *Bulletin of the Royal College of Surgeons of England* 2014;**96**(7):240–3.

AUTHORS

Shwetambra Vythialingam,

Urology Clinical Fellow, Gloucestershire Hospitals NHS Foundation Trust, UK.

Jaime Chan,

Core Surgical Trainee, Gloucestershire Hospitals NHS Foundation Trust, UK.

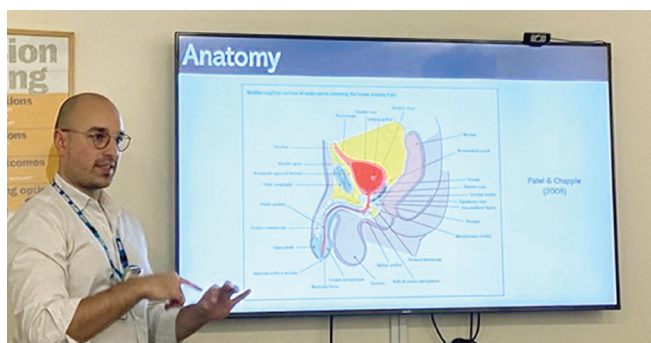
Tom-Abdul Mundy Malik,

Urology Clinical Fellow, Great Western Hospitals NHS Foundation Trust, UK.

Mahmoud Srour,

Urology Clinical Fellow, Great Western Hospitals NHS Foundation Trust, UK.

Declaration of competing interests: None declared.



First catheter skills course at Great Western Hospital in Swindon in November 2023.