

UROMETRE CHOICE – UROLOGY DAY UNIT (UDU), 2017

Goal: To reduce the unnecessary use of urometres across UHS.

Background: The unit decided to review the use of urometres for hourly urine measurements. The team noted that urometres did not always have hourly recordings completed and the patients found the urometre bulky and difficult to mobilize with. The team aimed to facilitate the decision-making process made by nursing and medical staff when choosing a urinary catheter bag for their patient. Currently within the Trust the urometre appears to be the first choice following catheterization, assuming the patient requires hourly urine measurements. The University Hospital Southampton has the 4th highest use of urometres compared to 29 other NHS trusts (2016).

Approach:

1. The UDU worked with wards across the Trust to measure urometre use and decision making.
2. Data was collected across 2 wards over 6 days due to time constraints.
3. 3 main reasons were identified for the use of urometres across wards: Post-op, MEWs Act and Monitoring.
4. The unit worked with the Catheter Working Group and other stakeholders to liaise project with ongoing work in the Trust.
5. Next steps for catheter reduction were developed.

The project is ongoing and staff plan to:

1. Produce education materials to encourage correct usage of urometres and catheters.
2. Collaborate across wards to explain urometre effects on patients and clinical waste stream.
3. Continue measuring effect on overall urometre use across wards.

Savings:

Over the measurement period, 57 urometres were used across 2 wards. This is an estimated use of 3,458 urometres per year. Of the 57 urometres used only 42 were used with reasonable justification, projected across a year this means potentially 2,548 justified urometre uses and 910 unnecessary uses. Taking into account the unit cost per urometre and theatre pack of £10.63 this adds up to an estimated £9,673.00 spent on unnecessary urometre procurement with 2563.58KgCO_{2e} emitted using the SDU carbon factor of 0.3kgCO_{2e}/£ for medical and surgical equipment.

The weight of a urometre and theatre pack adds up to 0.9kg, meaning 819kg of waste is generated by unnecessary urometre use. Further downstream, based on a clinical waste disposal cost of £481.45 £/tonnes for UHS, there is also £394.31 spent and 180.18KgCO_{2e} associated with clinical waste disposal of urometres yearly (using a carbon conversion factor of 220kgCO_{2e}/tonne for High Temperature Waste Disposal). **If the unnecessary urometre use was diverted through the development of educational materials and facilitation across the two wards a total of £10,061.31 and 3082.17KgCO_{2e} will be saved.** It should be noted that this is likely a conservative estimate as it does not count the time saved on unnecessary fitting of urometres and hourly readings as well as the possible reduction in patient infection and reduction in mobility associated with urometre use. This intervention could also be scaled up across other wards were urometres are used to expand cost and carbon savings.

‘The competition allowed the UDU team to consider the savings in energy, time and patient care.’ - Clare Tull, Senior Nurse