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Continence Nurses Society[®]

WEIGHING THE SIGNIFICANCE OF URINARY CATHETER REDUCTION



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NEONATAL PRACTICES INSPIRES PROGRAM

The need for accurate intake and output is at cross purposes with reduction in use of indwelling urinary catheters. Removing urinary catheters and allowing acutely ill patients to be incontinent of urine resulted in dramatically reduced accuracy of output data. In an attempt to improve accuracy of urinary output data while reducing the need for urinary catheters, several staff members with extensive neonatal intensive care experience conceived of a pilot program to weigh absorbent pads of incontinent adult patients. It has been common practice to weigh diapers to obtain accurate urinary output in non-toilet trained pediatric settings for decades.

PROCESS FOR SUCCESS

- Validated the need for accurate urinary output for acutely ill patients
- Implemented a process with goal of trying to reduce the use of urinary catheters
- Began weighing absorbent under pads of incontinent patients*
- Utilized highly absorbent incontinence pads that hold up to a liter of fluid
- Instituted the use of protective skin protocol by implementing Incontinence barrier cream cloths

*The process for weighing absorbent pads consisted of weighing 10 individual dry under pads to get the average weight of the dry under pad. Weight of the dry pad was subtracted from weight of wet under pads in order to obtain the amount of fluid from a patient, with the knowledge that one milliliter equals one gram. The difference of the weight in grams

translated to milliliters and informed the staff as to how much urine each patient emits.

Urine output is recorded and given to physicians in order to dose diuretics. The balance of fluid status is based on this urine output number gained from weighing pads. The amount of incontinence is critical to medical decision-making.

OUTCOME DATA

The increased focus on a structured process to both reduce urinary catheter usage as well as provide accurate urinary output by weighing pads of incontinent patients has led to a 33.3 percent reduction in catheter days in the seven months before and after the August pilot. In the seven months prior to the pilot, UVA Hospital had an average of 0.39 foley catheter days/1000 patient days compared with 0.26 in the seven months post change. UVA also saw a 23.9 percent reduction in the number of CAUTI/1000 foley days from 6.02 to 4.58 in the same seven months pre- and post- implementation. A more significant difference of 41.1 percent was seen in the number of CAUTI/1000 patient days, from 1.79 to 1.06.

The true benefit of a reduction in use of foley catheters is seen when catheter associated urinary tract infection (CAUTI) is adjusted for patient days as opposed to catheter days. Fewer catheters in use within a facility increase the impact of each CAUTI.

PATIENT CARE IMPLICATIONS

Tara and her team showed a dramatic reduction in use of urinary catheters at the UVA facility and a modest decrease in CAUTIs. Often a reduction in use of urinary catheters actually increases the CAUTI rate as this is calculated based on catheter days rather than patient days. The impact of any CAUTI is much greater with fewer urinary catheters in use. Institutions could therefore be penalized for initiatives to reduce use of urinary catheters.