

# GOOD BYE, UTI!

## REMOVAL OF TRADITIONAL BASIN BATHING METHODS LEADS TO 78% REDUCTION IN UTIs

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SARAH A. TODD MEMORIAL HOME

### BACKGROUND

Urinary tract infections (UTIs) are considered to be the most common bacterial infection, and catheter-associated UTIs are the most common hospital-acquired infection with more than 1 million reported each year in hospitals and nursing homes.<sup>1</sup> Individuals with catheters are more vulnerable to developing UTIs; the longer the catheter placement, the more difficult the bacteria may be to treat.<sup>2</sup> Overall, healthcare-associated infections (HAIs) are linked to 90,000 patient deaths each year<sup>3</sup> and are believed to increase the financial burden of care in excess of \$6.5 billion.

Sarah A. Todd Memorial Home is an active senior community and long-term care facility located in Carlisle, PA. The skilled nursing unit is comprised of 117 beds and four halls. In the fourth quarter of 2010, of 33 residents, nine (9) symptomatic UTIs were reported. Urine organisms consisted of: *Citrobacter freundii*, *E. coli*, MDR *Proteus mirabilis*, *Staph warneri*, MDR *Klebsiella pneumoniae*, *Proteus miabilis*, and *Pseudomonas aeruginosa*. Of particular concern was the increased prevalence of MDR *Proteus mirabilis*, a gram negative bug typically found in the intestinal tract, which affected three residents. Bath basins were suspected as a causative factor for the high infection rates, as two recently published studies demonstrate a link between basins and HAIs and catheter-associated UTIs (CAUTIs).<sup>8,9</sup> Residents were bathed twice daily with the use of basins. Beyond visual examination for cleanliness, there was no routine process for replacing or cleansing the bath basins. We set out to change the bathing practice in effort to reduce this potential source of infection among these residents.

### METHODS

**We hypothesized that by removing the basins and replacing bathing essentials with a non-basin based product, we could reduce the incidence of bacteria and, therefore, decrease UTIs.** During two days of in-servicing beginning December 15, 2010, the traditional bathing protocol was revised from a twice-daily regimen utilizing bath basins to a twice-daily basinless bathing protocol that included pre-packaged bathing washcloths.\* In addition to basins, all water bathing products used for morning and evening care were removed, including washcloths and soap. Staff and residents were educated on use of the new prepackaged bathing system, its benefits to residents, and the importance of compliance with the protocol. Staff was instructed to continue to check residents' skin while implementing the new bathing protocol for any skin integrity issues and to report any early signs of infection to the unit nurse. UTIs were then tracked over this two quarter period of basinless bathing.

*In addition to removing the basins, the author utilized prepackaged bathing cloths\* in place of traditional bathing methods.*

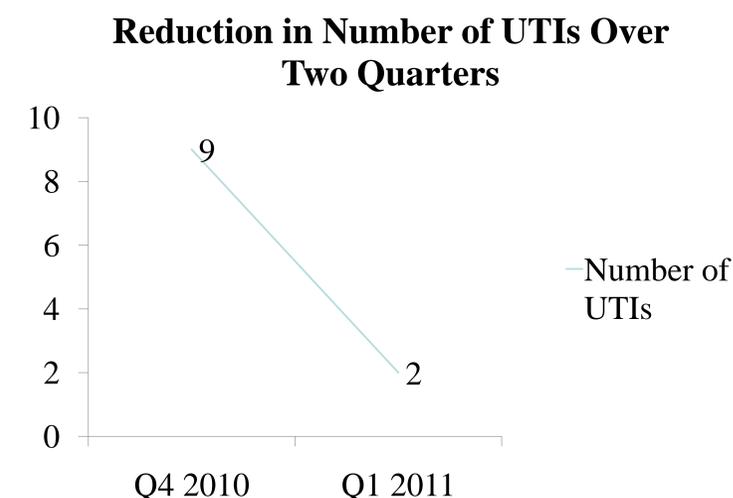
\*Sage Comfort Bath® Cleansing Washcloths



*After removing basins and implementing a basinless bathing regimen, UTIs decreased by 78%.*

### RESULTS

In Q4 2010, a total of 9 UTIs had been reported. After removing the basins and implementing a basinless bathing regimen, in Q1 2011 only two UTIs were reported, representing a **decrease of 77.8% over two quarters.** Of the two UTIs reported, one was noted in a male resident with a symptomatic history of urinary MRSA; the other was a recurrent UTI that was present in the resident upon admission.



### CONCLUSIONS

The reduction in symptomatic UTIs appears to be a result of the removal of bath basins and implementation of a revised bathing. The use of prepackaged bathing cloths for cleansing has yielded positive results for these residents. The overall skin condition of residents has improved, and the amount of antibiotic medication given to residents has decreased, thus potentially reducing the time and costs typically associated with treating UTIs. Staff also reported that the prepackaged bathing system takes less time to complete than the basin bath, which may contribute to compliance and the success of this revised bathing protocol. Most importantly, residents have not experienced symptoms that accompany an infection, e.g., pain, nausea, discomfort, feeling tired and being withdrawn from daily living.

### REFERENCES

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