

BD MedMined™

Case Study

About MultiCare Health System

MultiCare Health System is a leading-edge, integrated health organization made up of four hospitals including Allenmore Hospital, Good Samaritan Hospital, Mary Bridge Children's Hospital and Tacoma General Hospital, numerous primary care and urgent care clinics, multi-specialty centers, hospice, home health and many other services. A not-for-profit organization based in Tacoma, Washington since 1882, MultiCare has grown over the years in response to community needs.

"Nothing I've encountered in my 25 years of experience has had an impact on infection prevention efforts as much as MedMined services. I would not want to work in a facility without this tool."

Marcia Patrick, RN, MSN, CIC
Director of Infection Prevention & Control
MultiCare Health system



Success of hospital's UTI reduction bundle leads to a state-wide adoption

Recognized nationally for their commitment to high-quality patient care and investment in technology, MultiCare Health System partners with BD MedMined services to support their HAI surveillance and reduction efforts.

When the hospital system identified a high UTI rate in their facilities, they set out to devise a plan to reduce these infections. MultiCare's own data from MedMined services showed catheter-related UTIs add \$7,700 and seven extra days to a patient's stay. A Six Sigma approach to rapid change was implemented to target and steadily reduce catheter-associated UTIs (CA-UTI.) The MedMined services clinical team provided MultiCare with training and expertise to support the hospitals' UTI reduction efforts.

The UTI Reduction Project was developed as a nursing practice initiative to encourage a proactive approach to best practices for Foley catheter insertion and maintenance to decrease urinary tract infections. Starting out on one unit with a small core team of an infection preventionist, unit director, assistant nurse manager and a unit educator, they developed and implemented a plan that included identification of "present on admission" UTIs avoiding catheters where possible and daily evaluation for removal; meticulous aseptic insertion; perineal care and proper catheter and bag management. Their plan was flexible, quickly adjusting to changes as new opportunities arose, such as changing the collection technique for catheter urine specimens from a sterile cup to a closed tube with preservative to prevent small amounts of bacteria from becoming large numbers while the specimen was awaiting transport.

Education, consistent information sharing and feedback on infections throughout the hospitals are key to MultiCare's success. MedMined services provide real-time access to data, directing hospital staff to potential process breakdowns. The infection prevention team is enabled to make rapid interventions that can prevent costly and harmful infections. Providing continual feedback on HAIs and sharing best practices on a unit basis helps the nursing staff to be aware and accountable for the patient's care.

The UTI reduction bundle was so successful that all four hospitals in the MultiCare system now use the approach, and the Washington State Hospital Association has also adopted it for use by all hospitals in Washington. MultiCare recently had their Joint Commission survey for three out of four hospitals. The survey team was blown away with the outcomes the hospitals have seen in the last four years, calling them a shining star of Best Practice for Infection Prevention.

Rate trend summary

Baseline period (April - Dec. 2006) to active period (2007-2010)

Tacoma General Hospital

| | |
|---------------------------|-------------|
| NIM rate reduction | 8.64% |
| Patients protected | 206 |
| Direct cost avoided | \$4,953,882 |
| Length of stay days saved | 2,413 |

Mary Bridge Children's Hospital

| | |
|---------------------------|-------------|
| NIM rate reduction | 9.25% |
| Patients protected | 42 |
| Direct cost avoided | \$1,566,965 |
| Length of stay days saved | 512 |

Allenmore Hospital

| | |
|---------------------------|-----------|
| NIM rate reduction | 31.19% |
| Patients protected | 135 |
| Direct cost avoided | \$882,794 |
| Length of stay days saved | 455 |

“ We met with Joint Commission at our hospital about our awesome work to reduce infections. They are blown away and calling us their best practice example. The outcomes we achieved and could objectively show them using the data from MedMined services was priceless.”

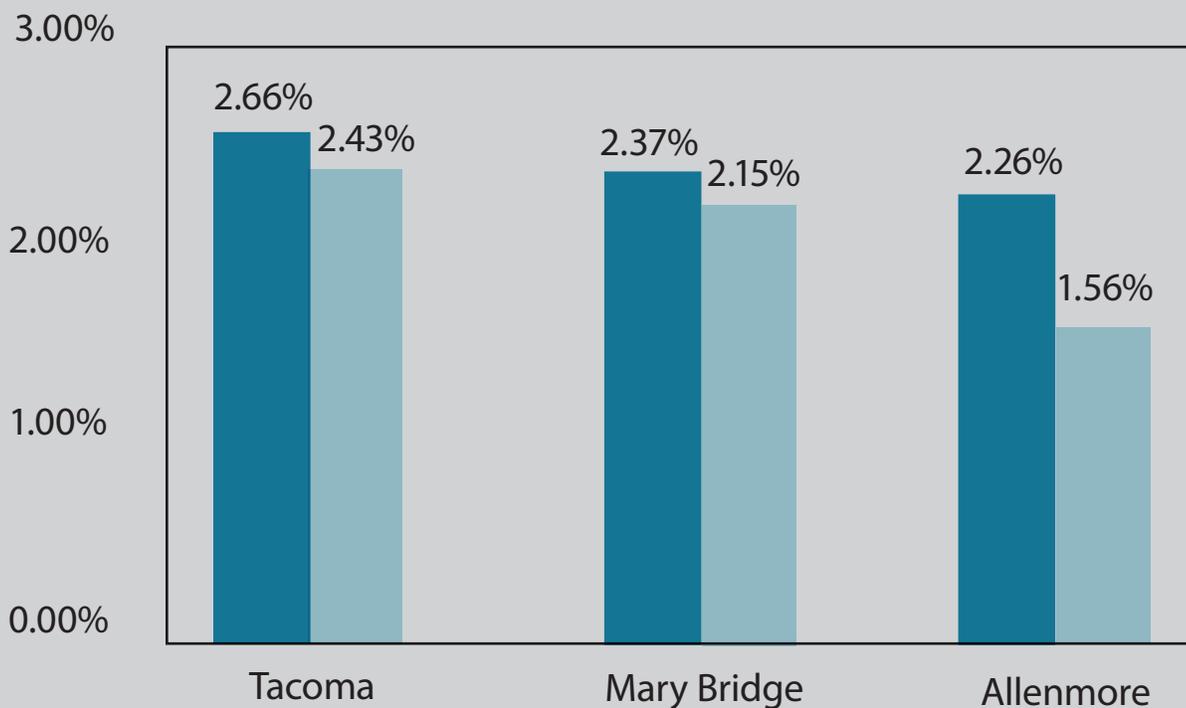
Jeanette Harris, MS, MSM, BS, MT (ASCP), CIC, Infection Preventionist

Tacoma General Hospital

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NIM rate trend and change Q2-Q4 2006 vs. 2007-2010



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