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. These hospitals contain numerous primary care and urgent care clinics, multispecialty centers, hospice, home health and many other services. A not-for-profit organization based in Tacoma, WA, since 1882, MultiCare Health System has grown 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 BD MedMined™ services. I would not want to work in a facility without this tool.”

Marcia Patrick, RN, MSN, CIC
Director of Infection Prevention and Control
MultiCare Health System
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 urinary tract infection (UTI) rate in their facilities, they set out to devise a plan to reduce these infections. MultiCare's own data from BD MedMined™ services showed catheter-related UTIs add $7,700 and 7 extra days to a patient's stay. A Six Sigma approach to rapid change was implemented to target and steadily reduce catheter-associated UTIs (CAUTI). The BD 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 UTIs. Beginning with one unit and a small core team consisting of an infection preventionist, unit director, assistant nurse manager and unit educator, they developed and implemented a plan that included identification of “present on admission” UTIs: avoiding catheters where possible with a 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. BD 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 of 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 of the four hospitals. The survey team was astounded with the outcomes the hospitals have seen in the last 4 years, calling them a shining star of best practice for infection prevention.

Rate trend summary

<table>
<thead>
<tr>
<th>Hospital</th>
<th>NIM* rate reduction</th>
<th>Patients protected</th>
<th>Direct cost avoided</th>
<th>Length of stay days saved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tacoma General Hospital</td>
<td>8.64%</td>
<td>206</td>
<td>$4,953,882</td>
<td>2,413</td>
</tr>
<tr>
<td>Mary Bridge Children’s Hospital</td>
<td>9.25%</td>
<td>42</td>
<td>$1,566,965</td>
<td>512</td>
</tr>
<tr>
<td>Allenmore Hospital</td>
<td>31.19%</td>
<td>135</td>
<td>$882,794</td>
<td>455</td>
</tr>
</tbody>
</table>

*NIM, nosocomial infection marker

“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 BD MedMined™ services was priceless.”

Jeanette Harris, MS, MSM, BS, MT (ASCP), CIC
Infection Preventionist, Tacoma General Hospital, MultiCare Health System
MultiCare Health System

NIM rate trend and change Q2–Q4 vs. 2007–2010

- Tacoma: 2.66% vs. 2.43%
- Mary Bridge: 2.37% vs. 2.15%
- Allenmore: 2.26% vs. 1.56%