

St. Luke's Regional Medical Center Eliminates VAP Rates

Through Oral Care Protocol and Clinical Changes

At a Glance

In 2001, St. Luke's Regional Medical Center conducted an oral care performance improvement study to assess practice standards and documentation efforts. Analysis of the findings led to additional research and subsequent implementation of new oral care tools.

Sage Product's Toothette® Oral Care Suction System was implemented and within a year the hospital had achieved better compliance and more consistent oral care documentation. Throughout 2002 and 2003, comprehensive oral care continued to be performed more consistently and effectively. Credit was given to Sage's product packaging and easy-to-use yankauer, suction toothbrushes, swabs and mouth rinses, which facilitated precise and effective oral care practice.

In November 2003, St. Luke's Regional enrolled in VHA Inc.'s Transformation of the ICU (TICU) program, a program that helps hospitals improve clinical practice and patient outcomes through small changes to the way they deliver care. Clinical changes combined with Sage's oral care system helped the hospital to reduce or eliminate incidence of ventilator-associated pneumonia (VAP) in its intensive care units. The hospital estimates a cost avoidance of \$120,000.

"All nosocomial VAPs are preventable," said Rick Bassett, RN, BSN, CCRN, Heart Institute Critical Care Services and TICU Project Manager, St. Luke's Regional Medical Center. "Sage's tools, combined with systematic changes to clinical practice, have allowed us to achieve tremendous results."

The Story St. Luke's Regional Medical Center, located in Boise, is Idaho's largest health care provider, with three full-service hospitals and more than 25 outpatient treatment facilities and clinics. With 600 physicians and 4,200 employees, the medical center serves more than 325,000 patients each year from throughout Idaho and its six adjoining states. The hospital is a 369-bed tertiary care center recognized as the multi-state region's leader in heart, cancer and women's and children's care.

Hospital staff conducted oral care on patients. Unfortunately, an internal oral care assessment found that efforts were inconsistent (78 percent compliance), documentation could be improved and that the practice itself was in question.

"Although we were performing oral care on our patients," said Bassett. "We were not sure if we were doing "best practice"."

The clinical nurse specialist at the time began an extensive research of oral care, protocols and available tools. In September 2001, the hospital implemented Sage's Toothette® Oral Care Suction System. The specialist and the staff liked Sage's pre-packaged kit, which they believed also provided the framework necessary for a consistent and comprehensive oral care program.

The clinical nurse specialist along with the hospital's performance improvement team worked with staff to strengthen support for the new product and program. The new oral care products were first introduced in the surgical intensive care unit (SICU).

"Staff knew that oral care was good practice, but there was a lot of confusion about how to use the products correctly and effectively," said Bassett.

In one week all SICU staff had been trained and was using the new product on patients. The Sage

representative assisted with the in-service trainings and Sage's educational materials were used to help with the training process.

Nurses and nursing assistants like Sage's standardized packaging. They "pull out" what they need when they need it, which makes performing oral care easy. Clinicians especially like the decrease in patient's "bad breath" which is considered "proof" that the patient is receiving good oral care.

"Decreased presence of halitosis, or bad breath, is an indicator for decreased levels of bacteria," said Bassett. "It is an outward sign that the patient's mouth is being well cared for and a sign to nurses that they are doing good work."

Good to Best Sage's Toothette® Suction Systems have been incorporated into everyday care of ventilator patients. This system has helped to standardize oral care practice. Whether or not a patient has received oral care is no longer a question. By looking at the product packaging, staff can automatically see whether care has been provided. Sage's oral care tools were implemented in the coronary care unit (CCU) and medical intensive care unit (MICU).

"Our ICUs only use Sage's Oral Care products, vented or not," said Bassett. "Our physicians support our efforts and have given oral care ownership to nursing."

When the hospital elected to participate in VHA's Transformation of the ICU program, the changes to clinical practice paired with the strong oral care program, allowed the hospital to realize tremendous VAP results. The MICU/CCU, which had a VAP rate greater than the Centers for Disease Control and Prevention, National Nosocomial Infection Surveillance System (NNIS) national average, dropped to zero. The SICU has decreased VAP rates to an average of less than one case per month. In addition, the hospital has decreased the number of ventilator days by 1.5 days per patient, which has helped to lower patient's VAP risk.

"At this point, any VAP case that we have is possibly due in part to an oral care compliance lapse," said Bassett. "We truly believe that the strong oral care efforts we already had in place have allowed us to achieve these results."

The hospital believes a combination of oral care efforts and other evidence - based practices for decreasing VAP helped to realize a \$120,000 cost avoidance in 2004. The hospital is taking action to stay on track to continued savings in 2005.

Value St. Luke's Regional fully believes that it made the right choice in partnering with Sage Products. Hospitals lack the time and resources to investigate and create evidence-based consistent practices. Partnering with Sage has proven valuable because the tools and solutions needed are already selected and packaged for consistent and appropriate use. In addition, the value of the outcomes far outweighs the investment.

In August 2004, the hospital converted to Sage's Q-Care® Oral Cleansing and Suctioning System q2°, which is a more complete oral care package that is tailored to deliver protocol compliance with the essential elements for a comprehensive oral care program. The new package includes an added anti-plaque solution and a flexible suction catheter.

"Sage's Toothette Oral Care products really are value - added products," said Bassett. "Sage provides the necessary tools to provide good, effective oral care on patients which allows for better outcomes and the best possible care."