Blount Memorial Reduces VAP Rates

Results

Blount Memorial Hospital had an oral care program in place, but compliance was inconsistent and documentation needed to be improved. The hospital had experienced a low incidence of ventilator-associated pneumonia (VAP), but hospital staff knew rates could be reduced even further.

In 2003, Clinical Nurse Specialists Debra Moroney, R.N., M.S.N. and Nancy Simpson, R.N., M.S.N, attended the annual meeting of the American Association of Critical-Care Nurses (AACN) and were introduced to Sage Products Toothette® Oral Care Suction System. The nurses believed these oral care tools could help them improve the hospital's VAP rates, in addition to enhancing consistency and ongoing documentation.

In July 2003, the hospital implemented Sage's Toothette® Oral Care Suction System and within six months:

- Experienced only two incidents of VAP
- Increased compliance
- Reached a comprehensive documentation process

By the end of the first quarter 2004, the hospital experienced zero incidence of VAP and saved the hospital more than $160,000.

"It has been very interesting to realize such a significant impact on patient care and the bottom-line with such a basic concept as oral care," said Sherry Hillis, MT (ASCP), MPH, CIC, infection control coordinator at Blount Memorial. "In this age of high technology, moving back to the basics is proving best."

Striving to Improve

Blount Memorial Hospital is a 310-bed facility located in Maryville, Tenn. The only full-service hospital in Blount County, Blount Memorial provides leading physicians, comprehensive services and advanced technologies to 110,000 residents in its community.

The hospital's staff was already using Sage's Toothette swabs and mouthwash before the AACN conference. Unfortunately, oral care efforts were inconsistent and staff needed to improve their commitment to the initiative. At best, patients' mouths were cared for once per nursing shift.

Hillis was familiar with Sage's comprehensive oral care tools and was immediately interested in partnering with Moroney and Simpson to improve oral care efforts in the intensive care unit (ICU) and coronary care unit (CCU). An Infection Control Committee sub-committee was formed to investigate current VAP rates and identify areas for improvement. The team consisted of nurses, representatives from respiratory therapy and infection control, the ICU intensivist and a physician. Upon completing its research, the sub-committee presented its findings to administration and requested a one-month trial period of Sage's Toothette® Oral Care Suction System.

"Our data showed that we could improve our VAP rates, and that oral care would be an effective tool for lowering rates," said Hillis. "We convinced them to let us try Sage's tools for a month."

Hillis believes it was the strong commitment and support of the hospital's assistant administrator of nursing and the ICU/CCU clinical director that helped win approval for the trial.

"Some clinical staff were not sure the oral care program would work but as the program evolved and results began to develop, administration and staff bought into the initiative," she said.
Getting Started

Upon approval, Hillis and the sub-committee implemented a new comprehensive oral care program that required each patient to receive oral care every two hours.

"The bedside staff was very concerned about the two-hour commitment," said Hillis. "Oral care every two hours and systematic documentation was seen as extra work that greatly affected heavy workloads and short-staffed units. Making time for this caused great concern."

The clinical nurse specialists were instrumental in helping nurses understand the value of oral care to their patients and keeping them motivated so that they would comply with the new program. The specialists trained each nurse and consistently communicated the program's results. In addition, the Sage representative helped train all shifts on how to properly use the oral care tools.

The staff also was motivated by the fact that they could see the program's success, and they received positive feedback from patients and their families. In addition, everyone noticed that the scent of the ICU and CCU was changing. Consistent and comprehensive oral care was eliminating the unattractive odors that emanated from patients' mouths and it was noticeable to anyone walking throughout the units.

"We did not anticipate this development at all," said Hillis. "But it certainly served as positive reinforcement for what we were trying to accomplish."

Today, both ICU and CCU staff are happy to use Sage's oral care products. They especially like the product packaging, which is all-inclusive and hangs easily at patients' bedsides as a visual reminder to care for patient's mouths. The packages also facilitate compliance to the oral care protocol because staff can easily determine whether or not oral care has been performed.

Hillis credits having passionate people champion the program for the improvements in compliance and documentation. Both clinical nurse specialists continue to keep staff motivated on a daily basis and encourage everyone to succeed.

"I am convinced that a successful oral care program requires consistent monitoring and motivation," said Hillis. "You can't sit back and let the program run by itself because it won't survive."

Currently, Blount Memorial is participating in a Knoxville-area project called Health Care 21 that aims to help hospitals reduce and prevent VAP incidence. Hillis and others from Blount Memorial meet regularly with staff from six other hospitals and businesses from the Knoxville, Tenn. area to discuss best practices in oral care. Consequently, Blount Memorial is continually improving its oral care program.

Success on All Counts

The one month trial period led to a six month endeavor. After six months of using Sage's Toothette® Oral Care Suction System and running a comprehensive oral care program, Blount Memorial staff knew they had experienced significant improvement in their VAP rates.

"We were thrilled to find that we had experienced zero cases of VAP for the winter of 2004," said Hillis. "The same time last year we had seen four cases of VAP. Immediately we knew that we had saved $160,000. In addition, hospital-acquired pneumonia has a 40 percent mortality rate and we believe we are also possibly saving lives."

According to Hillis, Blount Memorial experienced a total of nine VAP cases in 2003. In 2004, the
hospital had only three VAP cases during the entire year. In the first quarter of 2005, the hospital has seen only one case of VAP and the program continues to do extremely well.

Hillis credits the program's continued success to the fact that all levels of the patient care team participate and support the program. She believes infection control alone cannot execute such a comprehensive endeavor and that full commitment from clinical, physician and administrative staff is a must.