United Regional Uses Oral Care Protocol to Reduce VAP, Hospital Saves Close to $400,000

Results

Clinicians at United Regional Health Care System had been researching oral care as a prevention method to ventilator-associated pneumonia (VAP). Upon trial and evaluation of Sage's oral care products, the hospital implemented an oral care program that has resulted in tremendous success.

Since July 2003, United Regional has encountered a 41-percent reduction in VAP cases in its intensive care and critical care units. This reduction equates to a $398,930 savings in costs associated with VAP.

"The dollar savings is important, but the patient outcome is of greater importance," said Charlene Mossman, RN, DSN, CIC, infection control practitioner. "This means patients got better quicker and were able to go home because we successfully prevented an illness. Being able to achieve cost savings and positive patient outcomes is wonderful!"

Getting Started

United Regional Health Care System is a 500-bed hospital located in Wichita Falls, Texas, with approximately 300 physicians on staff. The hospital offers a Level III Trauma Center, a Level II Nursery, and premier cardiac and surgical services, and has a nine-county primary service area and an 11-county secondary service area.

In May 2003, Pamela Bradshaw, now chief nursing officer at United Regional, attended the National Teaching Institute's annual critical care conference as part of her role as the critical care director. While at the conference, Bradshaw visited the Sage Products booth and was impressed by Sage's Toothette® Oral Care Complete Suction System. By June, both the intensive care and critical care units were using the product.

"I had already been exploring oral care products for our hospital. I knew what I wanted and liked Sage product's ease of use and detailed package," said Bradshaw. "Everything you need is right there in one package."

United Regional already had been performing oral care on its patients using a basic toothbrush. However, the hospital wanted to decrease VAP rates and knew that a more extensive oral care program could help achieve that goal.

"I had been approached by unit nurses with research and articles they collected documenting oral care to help reduce incidence of VAP in patients," said Bradshaw. "I too, had been documenting such data. When I saw what Sage had to offer, it was a natural progression to start a more extensive oral care program."

As seen in the research, the clinical reasons for adopting an extensive oral care program were obvious. In addition, both administrators and clinicians saw that it was better for the hospital financially to invest in the product and decrease VAP rates.

Jill Griffin, RN, nursing manager for ICU and CCU, and Bradshaw began implementing a formalized oral care program. It was facilitated by strong support from clinicians, materials management and administration. Only minor concerns were voiced by clinicians who were worried that they would not be able to assess patients' mouths frequently due to their high workloads.

"Everyone was behind the product and program," said Bradshaw. "It also helped that we were able to
save additional money by purchasing through VHA Inc., our group purchasing organization."

By July 2003, a formal protocol was adopted. The protocol calls for: "the oral cavity to be assessed initially and daily by a registered nurse; "unconscious or intubated patients to be provided oral care every two to four hours; and "intubated patients to be assessed to determine the need for removal of oropharyngeal secretions every six hours, as well as prior to repositioning the tube or deflation of the cuff.

**Working Together**

As clinicians began using the product routinely, concern arose about the need for additional oral care tools. Clinicians felt they needed more Yankauer connectors per patient. The package features one. Sage quickly accommodated clinician's needs by supplying the unit with additional Yankauers.

"Working with Sage has been great," said Bradshaw. "I am extremely pleased with the high level service."

Sage's service to United Regional has included support with education and training efforts. Sage assisted with one-on-one trainings for clinicians on every shift in the ICU and CCU and provided templates of posters to help clinicians with the education process. The customized posters are displayed throughout both units and inside each patient room. After the initial training period, Sage called weekly to check on the use of the product.

"Our sales representative was kind of like a mother hen," adds Mossman. "Sage has been very supportive."

"Our representative also helped us to save money by suggesting that we stock additional Yankauers instead of opening whole kits to pull out what we needed and suggested that we use excess stock to make our own kits," said Bradshaw.

**Moving Forward**

Getting staff to follow the new protocol every two to four hours has required some strong teamwork. As CNO for the hospital, Bradshaw no longer has the time to monitor the oral care program with great detail, but knows each unit's challenge is to perform oral care closer to every two hours.

"We're currently at about 50 to 60 percent compliance with every two hours, but our ultimate goal is 100 percent," said Bradshaw. "We're working on it."

Overall, clinicians at United Regional believe oral care is effective in reducing incidences of VAP and are pleased at the results they have achieved. Staff feel good about what they are doing for their patients, and patients have indicated to staff that they feel better about having their mouths routinely cleaned.

"Our nurses strongly believe that oral care is affecting patient outcomes and are working hard to comply with set protocols," said Elizabeth M. Asturi, MSN, RN, current director, critical care. "Of course, it also helps that nurses really like the product."

Bradshaw recommends units that are considering an oral care program to make sure to include nurse input on creation of forms and protocol, and to make sure ample supplies of product are on hand when first starting oral care.

"Having a 10 to 14-day supply on hand helped us to experience a pretty smooth implementation," adds Bradshaw.