In 2009, Trinity Medical Center of the Quad Cities, a 526-licensed bed, community hospital with campuses in both Illinois and Iowa, experienced a hospital-acquired pneumonia (HAP) rate of 0.54/1000 patient days. The majority of pneumonia cases were related to aspiration. HAP related to aspiration is a pneumonia that occurs 48 hours or longer after hospital admission and is caused by substances such as colonized secretions, food, and liquid inhaled through the oropharyngeal airway into the lungs resulting in inflammation. The impact of aspiration pneumonia affects both the patient and Trinity Medical Center.

In the fall of 2009, a new approach to decreasing the rate of aspiration pneumonia was taken. A multidisciplinary group comprised of nursing, speech pathology, respiratory therapy and infection prevention developed an Aspiration Precaution Bundle (APB). The bundle contains ten interventions that require nursing, respiratory therapy and speech therapy participation such as oral care every four hours, A capella or PEP therapy and bedside swallow screening. In addition, a laminated sign was created to place in the patient room to remind the patient, family, and health care staff that the patient is at high risk for aspiration. The medical-surgical nurse is instrumental in assuring the APB is completed for all patients at risk for aspiration pneumonia.

The APB was implemented with education for six months on a 21-bed medical-surgical unit. Dysphagia were included in the trial. HAP decreased from a rate of 0.69/1000 patient days (nine months) on the test unit to zero where it remains to date. This reduction led to cost avoidance for the medical center of approximately $135,000.

Hospital Acquired Pneumonia (HAP) may be prevented by health care staff using a bundle of best practice interventions. The Aspiration Precaution Bundle (APB) was developed as a tool for staff to use to reduce or prevent the occurrence of hospital-acquired pneumonia. Prior to the implementation of this bundle, significant staff education was performed. The goal of the education was to staff to recognize patients at risk for aspiration and support best practice interventions for aspiration prevention. The medical unit at the Bettendorf Iowa campus was the trial unit for approximately nine months. With noted success on the trial unit with zero HAP’s reported, Health care staff at all campuses were educated and the aspiration bundle was implemented.

Since the implementation of the APB, hospital-acquired pneumonia occurrences have decreased significantly with the Bettendorf campus reporting zero HAP’s for the last twelve months. The other two campuses combined have reported only one occurrence after implementation of the APB.