Reduction of Community Acquired Pressure Ulcers Using a Static Air Pressure Relief Support Surface

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Purpose

The development of pressure ulcers has long been identified as a quality of care issue due to the associated pain, debility, and risk of infection. The foremost priority in preventing pressure ulcers is pressure relief. The purpose of this project was to reduce the rate of community acquired pressure ulcers for the patient population of Atlantic Home Care and Hospice (AHCH) using pressure relieving seating surfaces.

Method

A grant request was awarded by the Morristown Memorial Health Foundation to fund the project in the amount of $10,000.00, and was used to purchase 650 pressure relief seating surfaces. These were distributed by the visiting nurses to patients assessed to be at risk for developing a pressure ulcer with a score of 18 or less on the Braden Scale, which is an evidenced based pressure ulcer risk assessment tool. Retrospective chart reviews were done for the years 2007 through 2010 to establish a trend and compare outcomes.

This was accomplished utilizing Outcomes Based Quality Data from Home Health Compare and Strategic Healthcare Programs, LLC, which are well established data bases driven by the Center for Medicare and Medicaid Services. Due to changes in data collection from Oasis “B” in 2007-2009, to Oasis “C” in 2010, ulcers that were considered unobservable due to the presence of eschar in 2007-2009 were not counted. All other patients were counted over all four years regardless of a later admission to hospice, overall health status, or length of stay.
Results
As a result of this project the incidence of pressure ulcers on the trunk of the body for the AHCH population decreased to a total of 2 in 2010 from 20, 23, and 26 in 2007, 2008, and 2009 respectively for an average daily census of 1,100-1,200 patients. This project also affected the overall outcomes for the year 2010 in reportable data for AHCH as opposed to the state of New Jersey and national outcomes. In 2010 the reportable percentage of community acquired pressure ulcers for AHCH was 0.02 percent while the state of NJ and national outcomes were 0.24 percent and 0.17 percent respectively.

Conclusion
The outcome of this project supports the evidenced based intervention of providing pressure relief support surfaces to homebound patients who are at risk for the development of pressure ulcers. Unfortunately, if the home care patient is not in possession of a wheelchair, they are not eligible to receive a pressure relief seat cushion under their Medicare benefit. To that end this data will be utilized to seek additional grant money in order to continue to provide this intervention to the patient population of AHCH. The results of this project will also be published as data in home care regarding pressure ulcer reduction is limited.

Cost Implications
It costs the health care industry between 2 and 40 thousand dollars to heal a pressure ulcer depending on the stage and co-morbid factors (Bergstrom, et al.,1994). The cost of prevention is not as clearly defined in the literature, however, the cost of a pressure relief seating cushion ranges from 28 U.S. dollars to 350 U.S. dollars.

Another aspect is the cost to the patient. If the patient’s condition does not meet the criteria set forth by Medicare, then it is incumbent upon the patient to pay for any pressure relief equipment. This can be cost prohibitive for the home care population, who are living primarily on a fixed income. Ultimately this lack of needed equipment inhibits clinicians from being able to prevent the development of pressure ulcers for patients, and represents not only a quality of care issue but a quality of life issue as well.