Evidence-Based Practices in the Medical Intensive Care Unit
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Background:
In 2007 the Board of Trustees, Senior Leadership, and the Southwest Pulmonary Group (SPG) explored the possibility of starting an Intensivist Program in the Medical Intensive Care Unit (MICU). The program was initiated in August 2008 and has evolved into using evidence-based practice in all aspects of our practice in the MICU. The program goals are to standardize order sets based upon the best evidence available, build a more collaborative care team, and provide patient care based upon evidence while decreasing costs for the hospital.

Purpose:
To describe the challenges associated with implementing evidence-based practices (EBP) at a large 900 bed teaching hospital, the evidence-based practices that we are using, the results of our program after 3.5 years and the continued challenges, and future opportunities for the program's team members.

Design, Methods and Materials:
Since the inception of the EBP project in our MICU our EBP measures have expanded to include; use of the ventilator bundle, the central line bundle, the sepsis protocol, the glycemic control protocol, peptic ulcer prevention therapy, MRSA screening, foley catheter removal protocol, and pain education for all patients and/or their families at the time of admission to the ICU. In order to promote best practices in the MICU the Multidisciplinary Team evolved from only five members representing 4 disciplines in August 2008 to ten members representing 8 disciplines. Team members are the patient’s assigned Registered Nurse, Clinical Nurse Specialist, PharmD, Respiratory Therapist, Dietician, Case Manager, Psych Liason NP, Chaplain, Resident, and Intensivist. The hospital librarian is also part of this team and provides the group with frequent updates about the latest evidence and best practices. Evidence-based practices are validated using concurrent data collection, retrospective abstracted data from the electronic health record, and financial data provided by senior leadership.

Results:
The EBP program has evolved over the last 3.5 years with continuous improvements made to the methods for collecting the data, with additional bundles and protocols implemented, and with ever greater participation by the Multidisciplinary Team members. The two major outcomes that demonstrated the most significant savings for the hospital and improved patient care are the 2011 zero ventilator associated pneumonia rate and the central line infection rate of only 2.88. Significant improvements were also made in the areas of MRSA screening, pain education, the use of the sepsis protocol, and glycemic control protocol.
Conclusions:
The Multidisciplinary Team has expanded to include all disciplines. The patients and families receive care based upon the best current evidence available and care is coordinated between disciplines to ensure that all needs are addressed. The positive outcomes noted have convinced the hospital leadership to expand the program into the Surgical Intensive Care Unit by the end of this year. The team will face multiple challenges and opportunities with the expansion into another unit with totally different patient populations and physician groups.

Bibliography:


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