

Annual Report for the ICU Advisory and Improvement Committee

May 24, 2011

Shannon S. Carson, MD, Committee Chair

During the past year, the committee has focused on restructuring, ongoing quality improvement projects, new quality improvement projects, regulatory issues and policy, and research.

This academic year was the first full year of functioning after combining the original ICU Advisory Committee with the ICU Performance Improvement Team. The combined committee is larger and has broader multidisciplinary representation beyond the medical directors of the ICUs. For efficiency, the larger committee will function with the benefit of subcommittees assigned to specific projects. The full committee will meet bimonthly with schedule times in the intervening months devoted to subcommittee meetings. The committee welcomed the formation of the Neurosciences ICU with representation by the medical director and nurse managers.

The committee monitored ongoing quality improvement projects, namely adherence to bundles for prevention of catheter related bloodstream infections (CRBSI) and bundles for prevention of ventilator associated pneumonias (VAP). Outcome data indicate low rates for both important outcomes as a result of interdisciplinary interventions including a central line placement checklist, education regarding care and maintenance of lines, line carts in ICUs and the ED, and rounds checklists for VAP prevention measures including sedation interruption, spontaneous breathing trials, DVT prophylaxis, and head of bed elevation. This high performance has persisted despite the absence of incentives from insurers that have existed in the recent past, indicating a strong commitment to patient safety. Measures of adherence to bundles remain imperfect but useful, and efforts are ongoing to improve their specificity. This includes ways to make use of the electronic medical record for measuring bundle adherence.

New quality improvement efforts are focusing on approaches to early mobility for mechanically ventilated patients. The SICU has a research protocol in place, and the MICU will plan to adopt this same protocol to maintain uniformity. Current efforts are focused on feasibility and safety. As teams become comfortable with the protocol, assessments of resource needs will be performed and shared with the hospital. The committee also discussed approaches to improving multidisciplinary input during rounds by sharing benefits of different models used across ICUs. Finally, the committee has monitored the use and effectiveness of the progress note template being utilized in the adult ICUs. This template was formulated with important input from committee members.

For regulatory matters, the committee reviewed and updated multiple ICU policies. Significant changes were made to a policy for monitoring of QTc intervals, with ongoing

work on formulating a standard response to abnormalities. Data for nursing documentation of physician notification of critical values were reviewed, and adjustments to this policy are being discussed to improve adherence and documentation.

Finally, in addition to research on early mobility as discussed above, the committee reviewed a research proposal related to a genomics project that involves Carolina Donor Services and may impact patients in UNC ICUs.