## PharmacoEconomics & Outcomes News 280 - 16 Sep 2000

## Guidelines improve drug use in critical care

The implementation of rational-use guidelines for analgesia, sedation and neuromuscular blockade in the care of critically ill patients can improve drug use and reduce drug costs without compromising quality of care, report investigators from Upstate Medical University in Syracuse, New York, US.

At this university hospital, such guidelines were implemented in the medical and surgical intensive-care units (ICUs) in February 1996. Data on drug use, costs and outcomes were collected for 72 ICU patients who were treated before guideline implementation, and for 84 ICU patients who were treated 5–8 months after implementation.

Mean ventilator time was reduced from 317 hours before, to 167 hours after, guideline implementation; mean duration of ICU stay fell from 19.1 to 9.9 days, respectively. In addition, not only was there no increase in patient mortality after guideline implementation, but patients had improved functional status and required less rehabilitation than before the guidelines were implemented. Importantly, use of neuromuscular blockers was significantly decreased after guideline implementation (from 30 to 5% of patients), reducing the mean cost of these agents from \$US441.17 to \$US45.88 per day.

Mascia MF, et al. Pharmacoeconomic impact of rational use guidelines on the provision of analgesia, sedation, and neuromuscular blockade in critical care. Critical Care Medicine 28: 2300-2306, Jul 2000 80084248