

## VAP hospital costs substantial in the US

The cost related to ventilator-associated pneumonia (VAP) is "significant" among ventilated inpatients, and the implementation of focused interventions and quality improvement programmes to prevent such infections "would likely result in considerable cost savings to hospitals", say US-based researchers.<sup>1</sup>

They prospectively analysed cost and outcomes data for 819 patients who required mechanical ventilation for > 24 hours admitted to the ICU of the Missouri Baptist Medical Center between January 1998 and December 1999. During their ICU stay, 127 patients (15.5%) developed VAP. Compared with uninfected patients, patients with VAP required a significantly longer duration of mechanical ventilation, and were more likely to have a prolonged ICU and hospital length of stay, and to die during hospitalisation. In addition, patients with VAP incurred per-patient hospital costs that were \$US48 948 greater than those incurred by patients without VAP. Late-onset VAP (occurring > 96 hours after initiation of mechanical ventilation) was significantly more costly than early-onset VAP (occurring ≤ 96 hours after initiation of mechanical ventilation), note the researchers (median unadjusted cost of \$US60 562 vs \$US36 822 per patient). After adjustment for other factors influencing cost in the study cohort, the attributable cost of VAP was \$US11 897 per patient.

In an accompanying editorial, Dr Andrew Shorr from Walter Reed Army Medical Center, Washington DC, US, and Dr Richard Wunderink from Methodist Le Bonheur Healthcare Foundation, Tennessee, US, consider the current analysis to have been "carefully done".<sup>2</sup> They contend that, due to these new data regarding the cost associated with VAP, "one can hypothesize that even marginally beneficial preventive interventions are likely to yield significant net savings".

1. Warren DK, et al. Outcome and attributable cost of ventilator-associated pneumonia among intensive care unit patients in a suburban medical center. *Critical Care Medicine* 31: 1312-1317, May 2003.

2. Shorr AF, et al. Dollars and sense in the intensive care unit: the costs of ventilator-associated pneumonia. *Critical Care Medicine* 31: 1582-1583, May 2003.