

**Intensive care costing methodology: cost benefit analysis of mask continuous positive airway pressure for severe cardiogenic pulmonary oedema.**

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Costing data for intensive care admissions is important, not only for unit funding, but also for cost outcome analysis of new therapies. This paper presents an intensive care episode costing methodology using the example of a cost-benefit analysis of mask CPAP for severe cardiogenic pulmonary oedema (CPO). This analysis examines the intervention of admitting all patients with severe CPO to the intensive care unit for mask CPAP, compared with the previous practice of admitting only patients failing conventional non-CPAP treatment and requiring mechanical ventilation. The episode costs were determined from a prospective study which showed mask CPAP reduced the need for mechanical ventilation from 35% to 0%. The mean cost of a mask CPAP episode was \$1,156, with a mean stay of 1.2 days, compared with ventilated patients, \$5,055 and 4.2 days. The major contributors to cost in both groups were nursing and medical salaries, and hospital overheads. The cost of previous estimated yearly caseload of 35 ventilated patients (\$176,925) was greater than the cost associated with an increased caseload of 100 mask CPAP patients (\$115,600). We conclude that, despite an increase in admissions, mask CPAP for severe CPO is cost-effective.

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