

Impact of the Intensivists System on Intensive Care Unit Quality of Care and Utilization of Resources

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Objective: To evaluate the effects of full-time intensivists on intensive care unit (ICU) quality of care and utilization of health resources.

Methods: A quasi-experimental study design method was used to study patients in a medical ICU at a medical center during November and December of each year from 1998 to 2005. The effects of full-time intensivists on ICU expenditure and ICU stay were explored.

Results: There were no significant differences in the demographic characters of patients in the 'before-intensivists' group and those in the 'after-intensivists' group. ICU stay, ventilator days, ICU expenditure and ICU standardized mortality were significantly lower in the 'after-intensivists' group. The risk factors for ICU mortality include Acute Physiology and Chronic Health Evaluation II (APACHE II) score, ICU stay, hospital stay, ventilator use and input of intensivists. The prediction factors for ICU expenditure and ICU stay include APACHE II score, administration of intensivists and use of ventilators.

Conclusion: The administration of full-time intensivists in the ICU can effectively reduce mortality rate, shorten patient's ICU stay and number of ventilator use days, and decrease utilization of health resources.

Key words: intensive care unit, full-time intensivist, critical care medicine, medical care quality, health resources



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