The Joint Commission
Journal on Quality and Patient Safety®

The Impact of Hospitalist Co-Management Programs in Neurosurgery Departments

Medical complications are common among neurosurgical patients and can jeopardize their clinical results, leading to longer lengths of stay, higher costs, and higher readmission and mortality rates. Interventions, such as medical co-management, aimed at reducing medical complications, might improve outcomes, but the real-world impact of co-management is unknown.

A study featured in the May 2024 issue of *The Joint Commission Journal on Quality and Patient Safety (JQPS)* describes the implementation of a hospitalist co-management program in a neurosurgery department and considers its impact on the incidence of complications, mortality and length of stay.

THE STUDY

The quasi-experimental study aimed to determine whether general neurosurgery inpatients benefit from a hospitalist-led medical co-management program in terms of mortality, complications and use of resources.

The study compared a historical control period to a prospective intervention arm within a neurosurgical inpatient ward in Madrid.

Retrospectively compared to:

Co-managed patients:
From July to December 2019, 191 patients provided informed consent, were included in the study, and were prospectively followed.

Historical cohort:
From July to December 2017, data from 227 patients with similar characteristics and from the same unit were collected retrospectively.

The 2019 co-management program incorporated two hospitalists into the neurosurgery team. The hospitalists intervened in the diagnostic and therapeutic plan of patients, participated in clinical decisions and coordinated patient navigation with neurosurgeons.

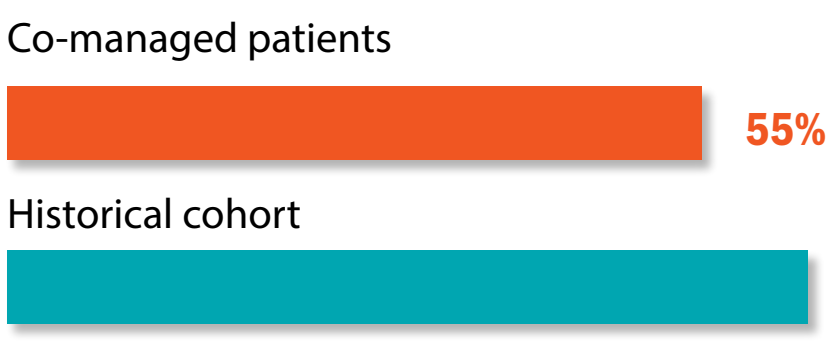
The incidence of moderate or severe complications such as in-hospital mortality and length of stay were compared, multivariate regression was used to adjust for confounders and the average treatment effect was estimated using inverse probability of treatment weighting.

THE RESULTS

Complications

A **significant reduction in the incidence of relevant medical complications** was seen in the co-managed patients.

Patients presenting at least one moderate, severe or lethal complication:



Mortality

No differences were found in in-hospital mortality rates.

The study found that hospitalist co-management was associated with a reduced incidence of complications and length of stay in neurosurgical patients, but there was no difference in in-hospital mortality.

To learn more about this study, visit:
https://www.jointcommissionjournal.com/article/S1553-7250(24)00006-0/fulltext

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