

The factors associated with 30-day hospital readmission rates

When a patient is discharged from a hospital, why might they be re-hospitalized within a month? Campione et. al reviewed 3 years of hospital claims data from four states to see which factors within a hospital might answer this question. They looked at a hospital's patient safety score, the illness severity level of hospital's admitted patients, and the economic factors of a hospital's service area. Among 524 hospitals, the average 30-day readmission rate was 13%, meaning for every 100 patients, 13 were re-hospitalized for any reason within 30 days after they were discharged. Using a statistical model, the researchers found that a hospital's patient safety score (called the AHRQ PSI90 composite) was less of a driver of readmission than the economic factors in the local area. As expected, the illness severity measures in the study were also strong factors, such as mortality rates, the reason for admission (i.e., heart, surgery, neurology, or other medical care), and a hospital's average length of days that a patient stays in the hospital.

The current AHRQ PSI90 composite only includes complications and adverse events that happened during the initial hospitalization. The authors suggest that a hospital's patient safety score would have a stronger association with the readmission rate if the patient safety measure included adverse events that can happen after hospital discharge like infections and blood clots.

This research demonstrates that there are hospital-level factors for readmissions that are out of the control of hospital administrators and clinicians. In fact, a 30-day readmission rate for a hospital is better understood as a community's 30-day readmission rate.

Lastly, the study results help substantiate the need for measure developers and the Centers for Medicare and Medicaid Services (CMS) to include hospital socioeconomic factors in their adjustment methodology for the 30-day readmission rate, which is used to assess readmissions penalties by CMS.

Publication

[Hospital-Level Factors Related to 30-Day Readmission Rates.](#)

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