

Measure at a Glance

CBE #5580: Excess Days in Acute Care (EDAC) Following Elective Primary Total Hip Arthroplasty (THA) and/or Total Knee Arthroplasty (TKA)

Measure Summary (Where does this measure seek to improve care?)

This measure looks at how many days patients spend in acute care within 30 days after discharge from planned hip or knee replacement surgery. Acute care includes the emergency department (ED, when a patient goes to the hospital for urgent care and leaves the same day), observation stays (short hospital stays for monitoring), and unplanned readmissions (unexpected returns to the hospital). The measure adds up all days spent in these settings.

The measure includes patients age 65 or older who are enrolled in Medicare Fee-for-Service (FFS) or Medicare Advantage (MA) and treated in non-federal short-term acute care hospitals.

The measure compares predicted days (what actually happened at a hospital) to expected days (what would be expected for similar patients at an average hospital) to show whether patients needed more or fewer extra days of care than expected.

Meaningfulness (Why does this matter to patients, and how could it improve their care?)

Returning to the hospital after discharge can be disruptive and costly and may increase the risk of complications. Patients and caregivers reported feeling frustration and confusion when needing to return to the hospital, especially when communication from providers is unclear.

The measure looks at these events within 30 days after discharge. This time period helps capture problems related to the surgery or the care patients received before leaving the hospital.

Patients and caregivers who provided input on this measure agreed it is meaningful and useful. Their feedback shows that it reflects real patient experiences and may help show how often patients may need additional hospital care after surgery.

Usability (How will providers use this measure to improve care delivery?)

This measure provides information about hospital performance by showing how many extra days patients spend in acute care after being discharged from the hospital from planned hip or knee replacement surgery. Hospitals, policymakers, and others may use this information to understand differences in care across hospitals and compare performance. This measure may help show where hospitals have higher or lower use of ED visits, observation stays, and unplanned readmissions after discharge.

The measure may also support public reporting and quality improvement efforts. Hospitals may use their results to review care processes and identify instances in which patients return for additional care. This information may help hospitals better understand patterns of acute care use after discharge.

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Feasibility (How can this measure be implemented without adding burden for providers and patients while still improving care?)

This measure uses billing data collected during routine care processes and stored in structured electronic sources. Centers for Medicare & Medicaid Services (CMS) calculates the measure automatically using claims data submitted for payment. This means hospitals and clinicians do not need to calculate the measure themselves. There are no reported feasibility concerns and no added burden on staff. The process does not change how clinicians deliver care or interact with patients.

Impact (How will using this measure improve patient experiences and outcomes?)

This measure focuses on the number of days patients spend in acute care within 30 days after discharge from hip or knee replacement surgery. These days include time in the ED, observation stays, and unplanned readmissions. Some of these events may be linked to complications such as infection, blood clots (venous thromboembolism), pain, or delayed movement. Reducing these events may lower the need for additional hospital care after surgery.

The measure also reflects the potential cost of post-discharge care. On average, an ED visit costs \$500 and a readmission costs \$9,000. Across the nation, the cost of possibly preventable hospital care after discharge is more than \$161 million per year. The measure may support efforts to improve care before discharge and during recovery, potentially reducing complications and return visits to hospital for additional care.

Performance Gap (Based on current performance, where and how much care can improve?)

Data from January 2022 to December 2023 across 3,128 hospitals and 285,672 patients show scores from -63.8 to 830.2 excess days per 100 discharges. Negative scores mean patients spent fewer days in the hospital than expected (better performance). Positive scores mean patients spent more days than expected (worse performance).

Hospitals at the 10th percentile (19.9) had about 65 fewer excess days per 100 discharges than hospitals at the 90th percentile (44.9). The measure results show differences in performance across hospitals.

Disclaimer: Battelle used generative artificial intelligence in the initial drafting of this document. Actual humans with relevant expertise subsequently validated and revised the content.