Mortality Following Hip Fracture Repair in California Hospitals, 2014 – 2015

Executive Summary

This report provides performance ratings on hip fracture surgical repair for 300 California acute care hospitals during January 2014-September 2015. The performance benchmark used in this report is the hospital risk-adjusted 30-day mortality rate. Mortality rates are risk-adjusted using a statistical technique that allows for fair comparisons of hospital performance even though some hospitals treat sicker patients. The report is based on data submitted to OSHPD by licensed acute care hospitals and on death certificate records submitted to the California Department of Public Health.

Technical Details

Additional information about this quality measure can be found in the OSHPD Technical Note for Producing Mortality Following Hip Fracture Repair in California Hospitals, 2014-2015 and the Hip Fracture Repair Outcomes Validation Study in California.

Hip Fracture Repair Mortality Results

Access the hip fracture repair 30-day mortality ratings of all California-licensed hospitals: Hip Fracture Repair Risk-Adjusted 30-Day Mortality Results, 2014-2015

Hip Fracture Repair Mortality Results

Key Findings:

- Between January 2014 and September 2015, a total of 34,531 patients (age 65 and above) were admitted to California hospitals with a hip fracture that required surgical repair. Of these patients, 1,806 patients (5.2 percent) died within 30 days of admission, either in the hospital or following discharge.
- About half (52 percent) of the deaths occurred after hospital discharge but within 30 days of admission.
- A total of 300 hospitals reported hip fracture repair cases for this time period. Quality ratings were calculated for 251 hospitals, and their risk-adjusted mortality rates (RAMRs) ranged from 0.0 to 14.5 percent. Ratings were not reported for the remaining 49 hospitals that had fewer than 30 hip fracture repair cases because the low number of cases made their ratings less reliable.
- Two hospitals (UC San Francisco Medical Center and El Camino Hospital) performed significantly “Better” than the state average. Their risk-adjusted mortality rates were
0.0 percent and 2.3 percent, respectively. El Camino Hospital was also rated as “Better” in 2013-2014.

- One hospital (Eisenhower Medical Center) performed significantly “Worse” than the state average. Its risk-adjusted mortality rate is 8.2 percent to 10.4 percent.

- A total of 248 hospitals were rated as “Average”, or not significantly different from the state average. Five hospitals (Bakersfield Memorial Hospital, Desert Regional Medical Center, Hemet Valley Medical Center, Kaiser Foundation Hospital – Fresno, and Torrance Memorial Medical Center) were improved to “Average” in 2014-2015 from “Worse” in 2013-2014.

- Risk of death increased sharply with age. Patients 85-94 years old were three times more likely to die than 65-74 year old patients, and those 95 or older five times more likely to die within 30 days. Males were twice as likely to die after the operation as females.

- Approximately 30 percent of hip surgery patients were diagnosed with dementia, and their risk of death was about two times that of patients without dementia. Nearly 16 percent of patients undergoing surgery had congestive heart failure, which increased their risk of death by 77 percent compared to other patients. About 2.5 percent of patients had cancer, and the risk of death was 1.6 times that of patients without cancer. Other common important conditions that increased patient risk of death included being hospitalized in the prior 12 months (1.6 times more likely) and chronic obstructive pulmonary disorders (1.4 times more likely).

The large differences seen in hospital mortality rates, after accounting for severity of illness in each hospital’s patients, suggest there were important differences in clinical practices between hospitals. The Validation Study and medical literature indicate there are best practices in patient care that can reduce patient short-term mortality. All hospitals caring for patients with hip fracture repair should implement evidence-based practices supported by the professional medical community. Hospitals with poor outcomes should review their clinical processes to identify and correct any shortcomings.

OSHPD also publishes the Agency for Healthcare Research and Quality (AHRQ) Inpatient Mortality Indicator for Hip Fracture. Some of the key differences between the OSHPD and the AHRQ measures are provided in the Technical Note for Producing Mortality Following Hip Fracture Repair in California Hospitals, 2014-2015.
