Mortality Following Hip Fracture Repair in California Hospitals, 2012 - 2013

Executive Summary

This report provides performance ratings on hip fracture surgical repair for 302 California acute care hospitals during 2012-2013. Hip fracture is a serious and costly public health concern with approximately 20,000 hip fractures occurring each year in California. Because of California’s aging population, the burden of hip fracture is likely to grow in coming years.

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 the Office of Statewide Health Planning and Development (OSHPD) by licensed acute care hospitals and on death certificate records submitted to the California Department of Public Health.

This is the first report on hospital hip fracture repair developed and produced by OSHPD. It is supported by a validation study that showed the outcome to be a valid measure of quality and the hospital data used to be reliably recorded. The information is intended to help consumers make more informed healthcare decisions, help payers and employers spend their healthcare dollars more wisely, and provide hospitals performance benchmarks they can use in their review of internal processes of care and quality improvement activities.

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, 2012-2013 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, 2012-2013

Key Findings:

Between January 2012 and December 2013, a total of 38,183 patients (age 65 and above) were admitted to California hospitals with a hip fracture that required surgical repair. Of these patients 5.4 percent died within 30 days of admission, either in the hospital or following discharge.

- A total of 2,057 deaths occurred among the hip fracture repair patients, for a 30-day mortality rate of 5.39 percent. About half (52 percent) of the deaths occurred after hospital discharge but within 30 days of admission.
- A total of 302 hospitals reported hip fracture repair cases for this time period. Quality ratings were calculated for 247 hospitals, and their risk-adjusted mortality rates (RAMRs) ranged from zero to 22.4 percent. Ratings were not reported for the remaining 55 hospitals that had fewer than 30 hip fracture repair cases because the low number of cases made their ratings less reliable.
- Three hospitals performed significantly “Better” than the state average. Their average risk-adjusted mortality rate was 1.0 percent (range zero percent to 1.8 percent). Five hospitals performed significantly “Worse” than the state average. Their average risk-adjusted mortality rate was 10.3 percent (range
9.1 percent to 13.3 percent). There were 239 hospitals rated as “Average”, or not significantly different from the state average.

- Risk of death increased sharply with age, with patients 85-94 years 3.3 times more likely to die than younger patients, and those 95 or older 5.2 times more likely to die within 30 days, all else being equal. Males were nearly twice (91 percent) as likely to die after the operation as females.

- Approximately 31 percent of hip surgery patients were diagnosed with dementia, and their risk of death was nearly two times that of patients without dementia. Nearly 18 percent of patients undergoing surgery had congestive heart failure, which increased their risk of death by 78 percent compared to other patients. Other common, important conditions that increased patient risk of death included chronic obstructive pulmonary disorders and being hospitalized in the prior 12 months.

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 current 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 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, 2012-2013.