

## THE DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION

# AHRQ – Inpatient Quality Indicators

## Hospital Inpatient Mortality Indicators for California, 2023 Report

### Overview of Inpatient Mortality Indicators

Evidence suggests that high mortality rates may be associated with deficiencies in the quality of hospital care provided. The Inpatient Mortality Indicators (IMIs) are part of a suite of measures called Inpatient Quality Indicators that are developed by the federal Agency for Healthcare Research and Quality (AHRQ). These measures provide a perspective on hospital quality of care and are calculated using patient data reported to the Department of Health Care Access and Information (HCAI) by all California-licensed hospitals.

The IMIs consist of six medical conditions (Acute Myocardial Infarction, Acute Stroke, Gastrointestinal Hemorrhage, Heart Failure, Hip Fracture, and Pneumonia) and three surgical procedures (Carotid Endarterectomy, Pancreatic Resection, and Percutaneous Coronary Intervention). Due to methodological changes by AHRQ, the following five measures, which were reported in previous years, have been discontinued for the 2023 report: Abdominal Aortic Aneurysm Repair (Open and Unruptured), Abdominal Aortic Aneurysm Repair (Endovascular and Unruptured), Acute Stroke (Hemorrhagic), Acute Stroke (Ischemic), and Acute Stroke (Subarachnoid).

### Why Report IMIs?

HCAI reports IMIs for California hospitals to improve the quality of patient care in the state through greater transparency, to help consumers make more informed health care decisions, to help payers and employers spend their health care dollars wisely, and to provide hospitals performance benchmarks that aid in their review of internal processes of care and quality improvement activities.

### How Did HCAI Calculate IMIs?

Data to calculate the IMIs come from all California-licensed acute care hospitals. All IMIs include risk-adjustment, a process that takes into account patients' pre-existing health conditions to "level the playing field" and allow for fair comparisons among hospitals. For this release, HCAI used Version 2024 of the AHRQ software that incorporates changes from previous versions made by AHRQ and HCAI. Additional information about the IMI calculation methods and technical details about their validity and limitations can be found on the [AHRQ website](#).

### Overview of 2023 IMI Results

A total of 315 California-licensed hospitals were included in the 2023 IMI results, which

evaluate performance across nine mortality measures. An overview of the findings is presented as follows. Note that a hospital's performance may vary across different mortality measures, with some indicators receiving better ratings while others may have worse ratings.

- When compared to the state average rates, 59 hospitals (18.7%) were rated “Better”, and 73 hospitals (23.2%) were rated “Worse” on at least one risk-adjusted mortality indicator.
- Of the 59 better-rated hospitals, 36 were rated “Better” on a single indicator, 15 on two indicators, 4 on three indicators, 3 on four indicators, and 1 on five indicators. The outperforming hospital was Northridge Hospital Medical Center, with a better rating on five indicators.
- Of the 73 worse-rated hospitals, 42 were rated “Worse” on a single indicator, 21 on two indicators, 5 on three indicators, 4 on four indicators, and 1 on five indicators. Bakersfield Memorial Hospital was rated worse on five indicators.
- There were 186 (59.0%) hospitals rated as “Average”, or not significantly different from the state average, for all nine mortality indicators.
- In general, hospitals showed fairly consistent performance across all nine indicators. Three hospitals (1.0%), however, had “mixed” results – they were rated “Better” on at least one indicator and “Worse” on at least one other indicator.

## 2023 California IMI Statewide Mortality Rates (Per 100 Cases)

### Medical Conditions

|                                                                                                         |     |
|---------------------------------------------------------------------------------------------------------|-----|
| Acute Myocardial Infarction [ <i>heart attacks including transfers between health care facilities</i> ] | 5.5 |
| Acute Stroke                                                                                            | 8.0 |
| Gastrointestinal Hemorrhage [ <i>intestinal bleeding</i> ]                                              | 2.8 |
| Heart Failure                                                                                           | 2.7 |
| Hip Fracture                                                                                            | 1.7 |
| Pneumonia                                                                                               | 6.2 |

### Surgical Procedures

|                                                                                                                                    |     |
|------------------------------------------------------------------------------------------------------------------------------------|-----|
| Carotid Endarterectomy [ <i>surgery on the carotid artery in neck</i> ]                                                            | 0.8 |
| Pancreatic Resection [ <i>removal of all or part of the pancreas</i> ]                                                             | 2.4 |
| Percutaneous Coronary Intervention (PCI) [ <i>non-surgical coronary artery disease treatment, including insertion of a stent</i> ] | 4.0 |