

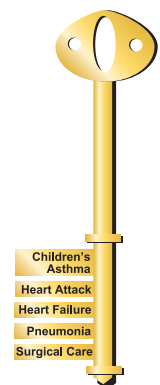
# Improving America's Hospitals

*The Joint Commission's Annual Report on Quality and Safety*

2011



New: Top Performers on Key Quality Measures



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# Letter from The Joint Commission President



The Joint Commission has taken another important stride in reporting quality performance in this year's *Improving America's Hospitals* report. For the first time, we are shining a light on accredited hospitals and critical access hospitals achieving excellence in accountability measure performance through the Top Performers on Key Quality Measures Program.

There are 405 hospitals being recognized for their 2010 performance through this program, representing approximately 14 percent of all Joint Commission-accredited hospitals reporting core measure performance data. These hospitals are leading the way, as American hospitals as a whole continue to improve quality performance. While all hospitals achieving improvements deserve congratulations, those making the list starting on page 10 have achieved an exemplary level of performance on certain key quality measures.

Each top-performing hospital met two 95 percent performance thresholds. First, each hospital achieved performance of 95 percent or above on a single, composite score that includes all the accountability measures for which it reports data to The Joint Commission, including measures that had fewer than 30 eligible cases or patients. Second, each hospital met or exceeded a 95 percent performance target for every accountability measure for which it reports data, excluding any measures with fewer than 30 eligible cases or patients.

We expect the percentage of hospitals and critical access hospitals achieving these thresholds to increase as we report on the Top Performers on Key Quality Measure Program in the fall of each successive year. This program is designed to be an incentive for better performance on accountability measures and to support organizations in their quest to do better.

The program also provides an opportunity for recognized hospitals to celebrate their achievement. In addition to being named in this report, top-performing hospitals will be highlighted at [www.jointcommission.org](http://www.jointcommission.org) and The Joint Commission's Quality Check website – [www.qualitycheck.org](http://www.qualitycheck.org) – and in special issues of Joint Commission Resources' *Perspectives* and *Benchmark* publications. Each top-performing hospital will receive a certificate of recognition and communication tools to aid in promoting its achievement.

On January 1, 2012, The Joint Commission will take yet another important step when it integrates performance expectations on accountability measures into accreditation standards. Joint Commission-accredited hospitals will be required to meet a new performance improvement requirement (Standard PI.02.01.03, Element of Performance 1) that establishes an 85 percent composite compliance target rate for performance on ORYX® accountability measures. The new requirement is intended to help improve performance on selected ORYX core measures of patient care. (This standard will not apply to the critical access hospital program.)

Better performance will help hospitals meet the pay-for-performance requirements of federal and state governments and private payers. Also, because the public expects transparency in hospital performance reporting, quality data has been available on [www.qualitycheck.org](http://www.qualitycheck.org) and the [Centers for Medicare & Medicaid Services' Hospital Compare website](http://www.hospitalcompare.com) – for some time.

By following evidence-based care processes, hospitals will continue to improve the quality of the care they provide. The Joint Commission stands ready as ever to help hospitals in quality improvement efforts that will create better outcomes for patients and a healthier nation.

Sincerely,

A handwritten signature in black ink that reads "Mark R. Chassin". The signature is fluid and cursive, with the first name "Mark" being the most prominent.

Mark R. Chassin, M.D., F.A.C.P., M.P.P., M.P.H.  
President  
The Joint Commission

# Executive Summary

For the first time, *Improving America's Hospitals: The Joint Commission's Annual Report on Quality and Safety* recognizes hospitals and critical access hospitals achieving excellence in accountability measure performance through the Top Performers on Key Quality Measures Program. These hospitals have achieved exemplary performance in using evidence-based care processes closely linked to positive patient outcomes.

This report now serves two purposes: 1) to report on the achievement of hospitals recognized in The Joint Commission's Top Performers on Key Quality Measures Program regarding performance on accountability measures; and 2) to report on the performance of Joint Commission-accredited hospitals for all measures – both accountability and non-accountability. Data from 2010 are used for both purposes.

Three measure sets (heart attack care, heart failure care and pneumonia care) have been followed for nine years (2002-2010) and six more measure sets have been followed from six years to one year (surgical care, children's asthma care, inpatient psychiatric services, venous thromboembolism care, stroke care and perinatal care test measures). These sets include both accountability and non-accountability measures. The magnitude of improvement on the individual accountability measures had a median value of 11.2 percent and ranged from +0.2 percentage points (for a measure that improved from 99.8 percent to 100.0 percent) to +64.6 percent (for a measure with nine years of reporting experience). All measures tracked over at least two years showed improvement from the year of inception to 2010.

While the data show impressive gains in hospital quality performance, improvements can still be made. Some hospitals perform better than others in treating particular conditions and in achieving patient satisfaction. Quality, safety and patient satisfaction results for specific hospitals can be found at [www.qualitycheck.org](http://www.qualitycheck.org).

More than 3,000 Joint Commission accredited hospitals contributed data. See the Glossary for definitions.

## Key Findings

**1. For the first time, 405 hospitals achieving excellence in accountability measure performance are being recognized, representing approximately 14 percent of all Joint Commission accredited hospitals and critical access hospitals reporting core measure performance data.**

This first recognition program is based on data that were reported for 2010 on 22 accountability measures (see Appendix 2). Each of the top performing hospitals met two 95 percent performance thresholds.

First, each hospital achieved performance of 95 percent or above on a single, composite score that includes all the accountability measures for which it reports data to The Joint Commission, including measures that had fewer than 30 eligible cases or patients.

Second, each hospital met or exceeded 95 percent performance on every accountability measure for which it reports data to The Joint Commission, excluding any measures that may have had fewer than 30 eligible cases or patients.

A 95 percent score means a hospital provided an evidence-based practice 95 times out of 100 opportunities to provide the practice. Each accountability measure represents an evidence-based practice – for example, giving aspirin at arrival for heart attack patients, giving antibiotics one hour before surgery, and providing a home management plan for children with asthma.

The Joint Commission expects the percentage of hospitals and critical access hospitals achieving these thresholds to increase as it reports on the Top Performers on Key Quality Measures Program in the fall of each successive year.

# Executive Summary (Cont'd)

## Key Findings (Cont'd)

**2. For the measures designated as accountability measures for 2010 (see Appendix 2), hospital performance improved significantly over time. This improvement has greatly enhanced the quality of care provided in America's hospitals.**

In 2002, hospitals achieved 81.8 percent “composite” performance on 957,000 opportunities to perform care processes related to accountability measures. In 2010, hospitals achieved 96.6 percent composite performance on 12.3 million opportunities – a nine-year improvement of 14.8 percentage points. A composite result sums up the results of all individual accountability measures into a single percentage rating.

**3. Hospitals have significantly improved the quality of care provided to heart attack, pneumonia, surgical care and children's asthma care patients, according to composite accountability measures results.**

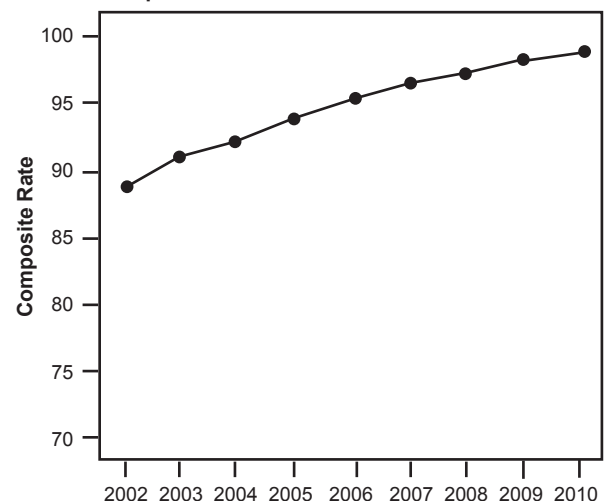
Composite accountability measures for heart attack and pneumonia care have been compiled since 2002, surgical care since 2005 and children's asthma care since 2008. *Note: There is no accountability composite for heart failure care since there is only one heart failure accountability measure. A composite must have at least two measures. However, the overall accountability composite results (see graph 5) include the one heart failure measure. For more information about accountability composite results versus composite results, see “Note on Calculations and Methodology” on page 32.*

- **The 2010 heart attack care result is 98.4 percent**, up from 86.9 percent in 2002 – an improvement of 11.5 percentage points. A 98.4 percent score means that hospitals provided an evidence-based heart attack treatment 984 times for every 1,000 opportunities to do so.

This composite includes:

- Aspirin at arrival
- Aspirin at discharge
- ACEI or ARB at discharge
- Beta-blocker at discharge
- Fibrinolytic therapy within 30 minutes
- PCI therapy within 90 minutes

**Graph 1: Heart attack care accountability composite**



# Executive Summary (Cont'd)

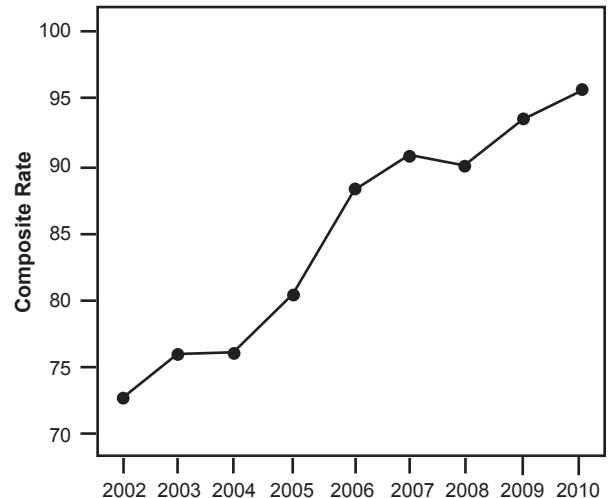
- **The 2010 pneumonia care result is 95.2 percent**, up from 72.3 percent in 2002 – an improvement of 22.9 percentage points.

This composite includes:

- Pneumococcal vaccination
- Blood culture in ED
- Antibiotics to immunocompetent patients\*
- Influenza vaccination

\* This measure (which is aligned with the Centers for Medicare & Medicaid Services measure) is separated into two measures (antibiotics to ICU patients and antibiotics to non-ICU patients) for reporting to The Joint Commission.

**Graph 2: Pneumonia care accountability composite**

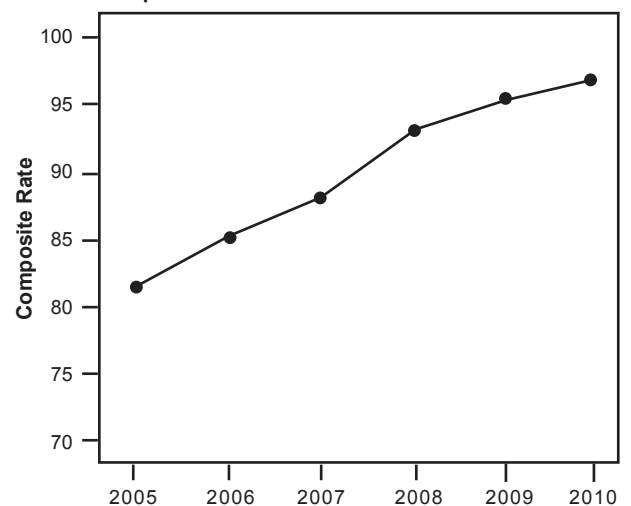


- **The 2010 surgical care result is 96.4 percent**, up from 82.1 percent in 2005 – an improvement of 14.3 percentage points.

This composite includes:

- Antibiotics within one hour before the first surgical cut
- Appropriate prophylactic antibiotics
- Stopping antibiotics within 24 hours
- Cardiac patient with 6 a.m. postoperative blood glucose
- Patients with appropriate hair removal
- Beta-blocker patients who received beta-blocker perioperatively
- Prescribing VTE medicine/treatment
- Receiving VTE medicine/treatment

**Graph 3: Surgical care accountability composite**



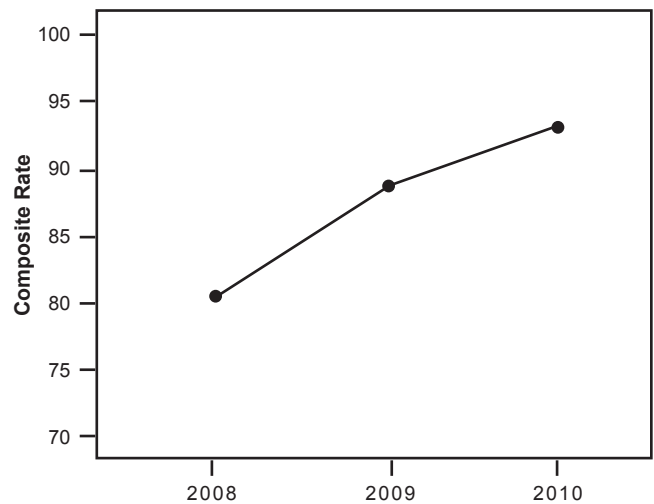
# Executive Summary (Cont'd)

- **The 2010 children's asthma care result is 92.3 percent**, up from 79.8 percent in 2008 – an improvement of 12.5 percentage points.

This composite includes:

- Relievers for inpatient asthma
- Systemic corticosteroids for inpatient asthma
- Home management plan of care

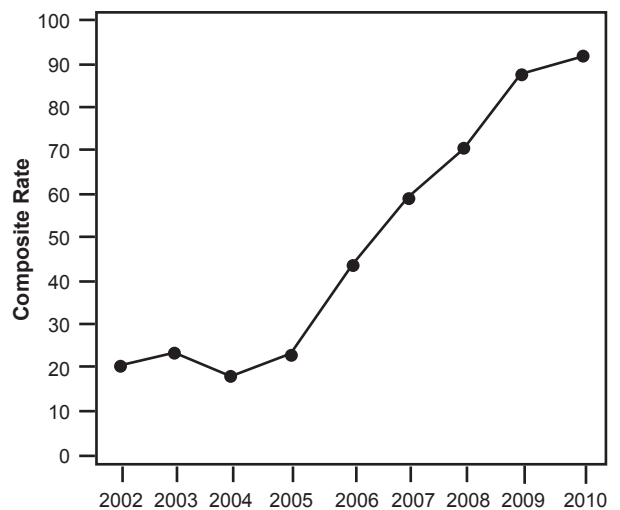
Graph 4: Children's asthma care accountability composite



4. **The percentage of hospitals achieving composite accountability measures greater than 90 percent has also dramatically improved.** In 2010, 91.7 percent of hospitals achieved 90 percent compliance, compared to 20.4 percent in 2002.

This composite includes accountability measures identified as such for 2010 (see Appendix 2).

Graph 5: Overall accountability composite greater than 90 percent



# Executive Summary (Cont'd)

## 5. Fifteen new measures were introduced in 2010.

They are the urinary catheter removed surgical care measure, the six VTE care measures, and the eight stroke care measures.

## 6. Improvement is still needed.

While hospitals achieved 90 percent or better performance on most individual measures, more improvement is needed. For example, hospitals finished 2010 with relatively low performance on two measures introduced in 2005.

- 60.5 percent performance on providing fibrinolytic therapy within 30 minutes to heart attack patients.
- 77.2 percent performance on providing antibiotics to (immunocompetent) intensive care unit pneumonia patients.

### What's new this year

- 405 hospitals achieving excellence in accountability measure performance have been recognized.
- Results on 15 new performance measures:
  - o One new surgical care measure: urinary catheter removed – see page 22
  - o VTE care measure set – see page 26
  - o Stroke care measure set – see page 26



# The Joint Commission's Top Performers on Key Quality Measures

In this report, The Joint Commission introduces a new recognition program – Top Performers on Key Quality Measures. This program recognizes accredited hospitals and critical access hospitals that attain and sustain excellence in accountability measure performance. This will be an annual recognition program that will occur in the fall of each year and will coincide with the publication of The Joint Commission's *"Improving America's Hospitals"* annual report.

There are 405 hospitals being recognized for 2010, which represent approximately 14 percent of Joint Commission accredited hospitals (of those hospitals that report core measure performance data). Each year, the percentage of top performing hospitals will vary. (Most Joint Commission accredited hospitals are required to report performance measure data to The Joint Commission while many critical access hospitals voluntarily report these data.)

## How Top Performers are determined

Recognition in The Joint Commission's Top Performers on Key Quality Measures program is based on an aggregation of accountability measure data reported to The Joint Commission during the previous calendar year. For example, this first recognition program is based on data that were reported for 2010 on 22 accountability measures (see Appendix 2). Specifically, a top performing hospital must first achieve performance of 95 percent or above on a single, composite score that includes all the accountability measures for which it reports data to The Joint Commission, including measures that had fewer than 30 eligible cases or patients. Second, the hospital also must meet a 95 percent performance threshold for every accountability measure for which it reports data to The Joint Commission, excluding any measures with fewer than 30 eligible cases or patients.

## Why the Top Performers program was developed

Since 2002, hospitals have been reporting data to The Joint Commission and have continuously shown improvement in performance on core measures. Now is the time to raise the bar. Most hospitals that are not recognized as top performers are still performing well on accountability measures, but there is still room for improvement. The Joint Commission provides various resources to help hospitals improve their accountability measure performance, including the Core Measure Solution Exchange, the Leading Practices Library and the Strategic Surveillance System (S3). These resources are available on The Joint Commission's secure Extranet site, Joint Commission Connect.

The Top Performers on Key Quality Measures program is designed to inspire better performance on accountability measures and to serve as an incentive for all hospitals to improve and be the best they can be. The program also provides an opportunity for recognized hospitals and critical access hospitals to celebrate their achievement of excellence in accountability measure performance.

The Top Performers on Key Quality Measures program is consistent with the current themes of the pay-for-performance requirements of federal and state governments, as well as many private payors, and the reported data have been available on The Joint Commission's Quality Check website and the Centers for Medicare & Medicaid Services' Hospital Compare website for some time. Today, the public expects transparency in the reporting of performance at the hospitals where they receive care.

# The Joint Commission's Top Performers on Key Quality Measures

The checkmark (✓) indicates the measure set(s) for which the hospital or critical access hospital is being recognized as a top performer.

| Hospitals by State  | City              | Heart Attack | Heart Failure | Pneumonia | Surgical | Children's Asthma |
|---|-------------------|--------------|---------------|-----------|----------|-------------------|
| <b>Alabama</b>  |                   |              |               |           |          |                   |
| Princeton Baptist Medical Center                            | Birmingham        | ✓            | ✓             | ✓         | ✓        |                   |
| Flowers Hospital  | Dothan            | ✓            | ✓             | ✓         | ✓        |                   |
| Medical Center Enterprise                                   | Enterprise        |              |               | ✓         | ✓        |                   |
| South Baldwin Regional Medical Center                       | Foley             |              | ✓             | ✓         | ✓        |                   |
| DeKalb Regional Medical Center                              | Fort Payne        | ✓            | ✓             | ✓         | ✓        |                   |
| Greenville Hospital Corporation                             | Greenville        |              |               | ✓         | ✓        |                   |
| Walker Baptist Medical Center                               | Jasper            | ✓            | ✓             | ✓         | ✓        |                   |
| Russellville Hospital                                       | Russellville      |              |               | ✓         | ✓        |                   |
| Helen Keller Hospital                                       | Sheffield         | ✓            | ✓             | ✓         | ✓        |                   |
| Citizens Baptist Medical Center                             | Talladega         |              | ✓             | ✓         | ✓        |                   |
| <b>Alaska</b>   |                   |              |               |           |          |                   |
| Central Peninsula Hospital                                  | Soldotna          |              |               | ✓         | ✓        |                   |
| <b>Arizona</b>  |                   |              |               |           |          |                   |
| Chandler Regional Medical Center                            | Chandler          | ✓            | ✓             | ✓         |          |                   |
| Payson Regional Medical Center                              | Payson            |              |               | ✓         | ✓        |                   |
| Phoenix Children's Hospital                                 | Phoenix           |              |               |           |          | ✓                 |
| Phoenix VA Health Care System                               | Phoenix           | ✓            | ✓             | ✓         | ✓        |                   |
| <b>Arkansas</b>   |                   |              |               |           |          |                   |
| Washington Regional Medical Center                          | Fayetteville      | ✓            | ✓             | ✓         | ✓        |                   |
| Helena Regional Medical Center                              | Helena            |              | ✓             | ✓         |          |                   |
| Arkansas Heart Hospital                                     | Little Rock       | ✓            | ✓             | ✓         | ✓        |                   |
| UAMS Medical Center   | Little Rock       | ✓            | ✓             |           |          |                   |
| Arkansas Surgical Hospital, LLC                             | North Little Rock |              |               |           | ✓        |                   |
| Jefferson Hospital Association, Inc.                        | Pine Bluff        | ✓            | ✓             | ✓         |          |                   |
| Summit Medical Center                                       | Van Buren         |              |               | ✓         |          |                   |
| <b>California</b>   |                   |              |               |           |          |                   |
| West Anaheim Medical Center                                 | Anaheim           | ✓            | ✓             | ✓         | ✓        |                   |
| Bakersfield Memorial Hospital                               | Bakersfield       | ✓            | ✓             |           | ✓        |                   |
| Hospital of Barstow, Inc.                                   | Barstow           |              | ✓             | ✓         | ✓        |                   |
| Eden Medical Center   | Castro Valley     | ✓            | ✓             | ✓         | ✓        |                   |
| Encino Hospital Medical Center                              | Encino            |              |               | ✓         |          |                   |
| Washington Hospital Healthcare System                       | Fremont           | ✓            | ✓             | ✓         | ✓        |                   |
| Garden Grove Hospital Medical Center                        | Garden Grove      | ✓            |               | ✓         | ✓        |                   |
| Kaiser Foundation Hospital - South Bay                      | Harbor City       | ✓            | ✓             | ✓         | ✓        |                   |
| Kaiser Foundation Hospital - Hayward/Fremont Medical Center | Hayward           | ✓            | ✓             | ✓         | ✓        |                   |
| The Huntington Beach Hospital                               | Huntington Beach  | ✓            | ✓             | ✓         | ✓        |                   |
| Scripps Memorial Hospital - La Jolla                        | La Jolla          | ✓            | ✓             | ✓         | ✓        |                   |
| La Palma Intercommunity Hospital                            | La Palma          | ✓            | ✓             | ✓         | ✓        |                   |
| VA Loma Linda Healthcare System                             | Loma Linda        | ✓            | ✓             | ✓         | ✓        |                   |
| Cedars-Sinai Medical Center                                 | Los Angeles       | ✓            | ✓             | ✓         | ✓        |                   |
| Sutter Central Valley Hospitals                             | Los Banos         |              |               | ✓         | ✓        |                   |
| Kaiser Foundation Hospital - Modesto/Manteca                | Modesto           | ✓            | ✓             | ✓         | ✓        |                   |
| Montclair Hospital Medical Center                           | Montclair         |              |               | ✓         | ✓        |                   |
| Prime Healthcare Paradise Valley LLC                        | National City     | ✓            | ✓             | ✓         | ✓        |                   |
| Alameda County Medical Center                               | Oakland           | ✓            | ✓             | ✓         | ✓        |                   |
| Kaiser Foundation Hospitals, Panorama City Medical Center   | Panorama City     | ✓            | ✓             | ✓         | ✓        |                   |
| Petaluma Valley Hospital                                    | Petaluma          | ✓            |               | ✓         | ✓        |                   |
| Prime Healthcare Services - Shasta, LLC                     | Redding           | ✓            | ✓             | ✓         | ✓        |                   |
| Kaiser Foundation Hospital - Sacramento/Roseville           | Roseville         | ✓            | ✓             | ✓         | ✓        |                   |

# The Joint Commission's Top Performers on Key Quality Measures (Cont'd)

| Hospitals by State                                 | City                | Heart Attack | Heart Failure | Pneumonia | Surgical | Children's Asthma |
|--|---------------------|--------------|---------------|-----------|----------|-------------------|
| <b>California (Cont'd)</b>                         |                     |              |               |           |          |                   |
| Sutter Medical Center, Sacramento                  | Sacramento          | ✓            | ✓             | ✓         |          |                   |
| VA San Diego Healthcare System                     | San Diego           | ✓            | ✓             | ✓         | ✓        |                   |
| San Dimas Community Hospital                       | San Dimas           |              |               | ✓         | ✓        |                   |
| California Pacific Medical Center - St. Luke's     | San Francisco       |              | ✓             | ✓         | ✓        |                   |
| Good Samaritan Hospital LP                         | San Jose            | ✓            | ✓             | ✓         | ✓        |                   |
| Sutter Maternity & Surgery Center                  | Santa Cruz          |              |               |           | ✓        |                   |
| Saint John's Health Center                         | Santa Monica        | ✓            | ✓             | ✓         |          |                   |
| Kaiser Foundation Hospital - South San Francisco   | South San Francisco | ✓            | ✓             | ✓         | ✓        |                   |
| Banner Lassen Medical Center                       | Susanville          |              |               | ✓         | ✓        |                   |
| Sutter Central Valley Hospitals                    | Tracy               |              |               | ✓         | ✓        |                   |
| Kaiser Foundation Hospital - Woodland Hills        | Woodland Hills      | ✓            | ✓             | ✓         | ✓        |                   |
| <b>Colorado</b>                                    |                     |              |               |           |          |                   |
| Platte Valley Medical Center                       | Brighton            | ✓            |               | ✓         | ✓        |                   |
| Rose Medical Center                                | Denver              | ✓            | ✓             | ✓         |          |                   |
| Swedish Medical Center                             | Englewood           | ✓            | ✓             | ✓         |          |                   |
| Avista Adventist Hospital                          | Louisville          |              |               | ✓         |          |                   |
| North Suburban Medical Center                      | Thornton            | ✓            |               | ✓         |          |                   |
| <b>Connecticut</b>                                 |                     |              |               |           |          |                   |
| Griffin Hospital                                   | Derby               | ✓            | ✓             | ✓         | ✓        |                   |
| <b>Florida</b>                                     |                     |              |               |           |          |                   |
| JFK Medical Center Limited Partnership             | Atlantis            | ✓            | ✓             | ✓         | ✓        |                   |
| Aventura Hospital and Medical Center               | Aventura            | ✓            | ✓             | ✓         | ✓        |                   |
| Bartow Regional Medical Center                     | Bartow              |              | ✓             | ✓         |          |                   |
| West Boca Medical Center, Inc.                     | Boca Raton          | ✓            | ✓             | ✓         | ✓        |                   |
| Brooksville & Spring Hill Regional Hospitals       | Brooksville         | ✓            | ✓             | ✓         |          |                   |
| Oak Hill Hospital                                  | Brooksville         | ✓            | ✓             | ✓         | ✓        |                   |
| Coral Gables Hospital                              | Coral Gables        | ✓            | ✓             | ✓         | ✓        |                   |
| Doctors Hospital                                   | Coral Gables        | ✓            | ✓             | ✓         | ✓        |                   |
| Pasco Regional Medical Center                      | Dade City           |              | ✓             | ✓         |          |                   |
| Delray Medical Center, Inc.                        | Delray Beach        | ✓            | ✓             | ✓         | ✓        |                   |
| Lawnwood Regional Medical Center & Heart Institute | Fort Pierce         | ✓            | ✓             | ✓         | ✓        | ✓                 |
| Fort Walton Beach Medical Center, Inc.             | Fort Walton Beach   | ✓            | ✓             | ✓         | ✓        |                   |
| North Florida Regional Medical Center              | Gainesville         | ✓            | ✓             | ✓         | ✓        |                   |
| Regional Medical Center Bayonet Point              | Hudson              | ✓            | ✓             | ✓         | ✓        |                   |
| Memorial Hospital Jacksonville                     | Jacksonville        | ✓            | ✓             | ✓         | ✓        |                   |
| Lake City Medical Center                           | Lake City           | ✓            | ✓             | ✓         | ✓        |                   |
| Largo Medical Center                               | Largo               | ✓            | ✓             | ✓         | ✓        |                   |
| Lehigh Regional Medical Center                     | Lehigh Acres        | ✓            | ✓             | ✓         |          |                   |
| Fishermen's Hospital                               | Marathon            |              |               | ✓         |          |                   |
| Northwest Medical Center                           | Margate             | ✓            | ✓             | ✓         | ✓        |                   |
| Kendall Regional Medical Center                    | Miami               | ✓            | ✓             | ✓         | ✓        |                   |
| South Miami Hospital                               | Miami               | ✓            | ✓             | ✓         | ✓        |                   |
| Santa Rosa Medical Center                          | Milton              |              |               | ✓         | ✓        |                   |
| Physicians Regional Healthcare System              | Naples              | ✓            | ✓             | ✓         | ✓        |                   |
| Community Hospital                                 | New Port Richey     | ✓            | ✓             | ✓         | ✓        |                   |
| Twin Cities Hospital                               | Niceville           |              |               | ✓         | ✓        |                   |
| Ocala Regional Medical Center                      | Ocala               | ✓            | ✓             | ✓         | ✓        |                   |
| Raulerson Hospital                                 | Okeechobee          | ✓            | ✓             | ✓         | ✓        |                   |
| Orange Park Medical Center                         | Orange Park         | ✓            | ✓             | ✓         | ✓        |                   |
| Gulf Coast Medical Center                          | Panama City         |              | ✓             | ✓         | ✓        |                   |
| Memorial Hospital Pembroke                         | Pembroke Pines      | ✓            | ✓             | ✓         | ✓        |                   |

# The Joint Commission's Top Performers on Key Quality Measures (Cont'd)

| Hospitals by State                                    | City              | Heart Attack | Heart Failure | Pneumonia | Surgical | Children's Asthma |
|---|-------------------|--------------|---------------|-----------|----------|-------------------|
| <b>Florida (Cont'd)</b>                               |                   |              |               |           |          |                   |
| Memorial Hospital West                                | Pembroke Pines    | ✓            | ✓             | ✓         | ✓        |                   |
| West Florida Regional Medical Center, Inc.            | Pensacola         | ✓            | ✓             | ✓         |          |                   |
| Plantation General Hospital                           | Plantation        |              | ✓             | ✓         |          |                   |
| Westside Regional Medical Center                      | Plantation        | ✓            | ✓             | ✓         | ✓        |                   |
| Fawcett Memorial Hospital                             | Port Charlotte    | ✓            | ✓             | ✓         | ✓        |                   |
| St. Lucie Medical Center                              | Port Saint Lucie  | ✓            | ✓             | ✓         | ✓        |                   |
| St. Cloud Regional Medical Center                     | Saint Cloud       | ✓            | ✓             | ✓         |          |                   |
| Edward White Hospital                                 | Saint Petersburg  |              |               | ✓         | ✓        |                   |
| Central Florida Regional Hospital                     | Sanford           | ✓            | ✓             | ✓         | ✓        |                   |
| Doctors Hospital of Sarasota                          | Sarasota          | ✓            | ✓             | ✓         | ✓        |                   |
| Sebastian River Medical Center                        | Sebastian         | ✓            | ✓             | ✓         |          |                   |
| Highlands Regional Medical Center                     | Sebring           |              | ✓             | ✓         |          |                   |
| Martin Memorial Medical Center, Inc.                  | Stuart            | ✓            | ✓             | ✓         | ✓        |                   |
| South Bay Hospital                                    | South City Center | ✓            | ✓             | ✓         | ✓        |                   |
| Capital Regional Medical Center                       | Tallahassee       | ✓            | ✓             | ✓         |          |                   |
| University Hospital Ltd.                              | Tamarac           | ✓            | ✓             | ✓         | ✓        |                   |
| Mariners Hospital                                     | Tavernier         |              |               | ✓         | ✓        |                   |
| Venice HMA, Inc.                                      | Venice            | ✓            | ✓             | ✓         |          |                   |
| Columbia Hospital                                     | West Palm Beach   | ✓            |               | ✓         | ✓        |                   |
| Cleveland Clinic Florida                              | Weston            | ✓            | ✓             | ✓         | ✓        |                   |
| <b>Georgia</b>  |                   |              |               |           |          |                   |
| Atlanta Medical Center                                | Atlanta           | ✓            | ✓             | ✓         | ✓        |                   |
| Doctors Hospital of Augusta                           | Augusta           | ✓            | ✓             | ✓         | ✓        |                   |
| Higgins General Hospital                              | Bremen            |              |               | ✓         |          |                   |
| Cartersville Medical Center                           | Cartersville      | ✓            | ✓             | ✓         | ✓        |                   |
| Polk Medical Center                                   | Cedartown         |              |               | ✓         |          |                   |
| Hughston Hospital                                     | Columbus          |              |               |           | ✓        |                   |
| VA Medical Center - Atlanta                           | Decatur           | ✓            | ✓             | ✓         | ✓        |                   |
| Coliseum Northside Hospital                           | Macon             |              | ✓             | ✓         | ✓        |                   |
| Walton Regional Medical Center                        | Monroe            |              |               | ✓         |          |                   |
| North Fulton Regional Medical Center, Inc.            | Roswell           | ✓            |               | ✓         | ✓        |                   |
| East Georgia Regional Medical Center                  | Statesboro        | ✓            | ✓             | ✓         |          | ✓                 |
| Tanner Medical Center/Villa Rica                      | Villa Rica        |              | ✓             | ✓         | ✓        |                   |
| Barrow Regional Medical Center                        | Winder            |              |               | ✓         |          |                   |
| <b>Idaho</b>  |                   |              |               |           |          |                   |
| Boise VA Medical Center                               | Boise             |              |               | ✓         |          |                   |
| St. Luke's Magic Valley Medical Center                | Twin Falls        | ✓            | ✓             | ✓         | ✓        |                   |
| <b>Illinois</b>                                       |                   |              |               |           |          |                   |
| Anna Hospital Corporation                             | Anna              |              |               | ✓         |          |                   |
| Advocate Good Shepherd Hospital                       | Barrington        | ✓            | ✓             |           | ✓        |                   |
| Advocate Trinity Hospital                             | Chicago           | ✓            | ✓             |           | ✓        |                   |
| Children's Memorial Hospital                          | Chicago           |              |               |           |          | ✓                 |
| Jesse Brown VA Medical Center                         | Chicago           | ✓            | ✓             | ✓         | ✓        |                   |
| Advocate Good Samaritan Hospital                      | Downers Grove     | ✓            | ✓             |           | ✓        |                   |
| Little Company of Mary Hospital & Health Care Centers | Evergreen Park    | ✓            | ✓             | ✓         | ✓        |                   |
| Galesburg Cottage Hospital                            | Galesburg         | ✓            |               | ✓         | ✓        |                   |
| Delnor - Community Hospital                           | Geneva            | ✓            | ✓             | ✓         |          |                   |
| Granite City Illinois Hospital Company, LLC           | Granite City      | ✓            | ✓             | ✓         | ✓        |                   |
| Advocate South Suburban Hospital                      | Hazel Crest       | ✓            | ✓             |           | ✓        |                   |
| Advocate Condell Medical Center                       | Libertyville      | ✓            | ✓             | ✓         | ✓        |                   |
| James A. Lovell Federal Health Care Center            | North Chicago     |              | ✓             | ✓         |          |                   |

# The Joint Commission's Top Performers on Key Quality Measures (Cont'd)

| Hospitals by State                         | City             | Heart Attack | Heart Failure | Pneumonia | Surgical | Children's Asthma |
|--|------------------|--------------|---------------|-----------|----------|-------------------|
| <b>Illinois (Cont'd)</b>                   |                  |              |               |           |          |                   |
| Oak Forest Hospital of Cook County         | Oak Forest       |              | ✓             |           |          |                   |
| Advocate Lutheran General Hospital         | Park Ridge       | ✓            | ✓             |           | ✓        |                   |
| Pekin Memorial Hospital                    | Pekin            | ✓            | ✓             | ✓         | ✓        |                   |
| Red Bud Regional Hospital, LLC             | Red Bud          |              |               | ✓         | ✓        |                   |
| Genesis Medical Center, Illini Campus      | Silvis           |              | ✓             | ✓         | ✓        |                   |
| <b>Indiana</b>                             |                  |              |               |           |          |                   |
| Bluffton Regional Medical Center           | Bluffton         |              |               | ✓         | ✓        |                   |
| Dupont Hospital                            | Fort Wayne       |              |               | ✓         | ✓        |                   |
| Lutheran Musculoskeletal Center            | Fort Wayne       |              |               |           | ✓        |                   |
| Dukes Memorial Hospital                    | Peru             |              |               | ✓         |          |                   |
| Terre Haute Regional Hospital              | Terre Haute      | ✓            | ✓             | ✓         |          |                   |
| <b>Iowa</b>                                |                  |              |               |           |          |                   |
| Alegent Health Mercy Hospital              | Council Bluffs   | ✓            |               | ✓         | ✓        |                   |
| Keokuk Area Hospital                       | Keokuk           |              |               | ✓         |          |                   |
| <b>Kansas</b>                              |                  |              |               |           |          |                   |
| Overland Park Regional Medical Center      | Overland Park    | ✓            | ✓             | ✓         | ✓        |                   |
| Saint Francis Health Center, Inc.          | Topeka           | ✓            | ✓             | ✓         | ✓        |                   |
| Robert J. Dole VA Medical Center           | Wichita          |              | ✓             | ✓         | ✓        |                   |
| <b>Kentucky</b>                            |                  |              |               |           |          |                   |
| St. Joseph Health System, Inc.             | Berea            |              |               |           | ✓        |                   |
| Greenview Regional Hospital                | Bowling Green    |              |               | ✓         | ✓        |                   |
| Frankfort Regional Medical Center          | Frankfort        |              | ✓             | ✓         | ✓        |                   |
| Hospital of Fulton, Inc.                   | Fulton           |              |               | ✓         | ✓        |                   |
| Harlan Appalachian Regional Hospital       | Harlan           |              | ✓             | ✓         | ✓        |                   |
| Jackson Hospital Corporation               | Jackson          |              |               | ✓         |          |                   |
| Spring View Hospital                       | Lebanon          |              |               | ✓         | ✓        |                   |
| Central Baptist Hospital                   | Lexington        | ✓            | ✓             | ✓         | ✓        |                   |
| Hospital of Louisa, Inc.                   | Louisa           |              |               | ✓         | ✓        |                   |
| Logan Memorial Hospital                    | Russellville     |              |               | ✓         |          |                   |
| <b>Louisiana</b>                           |                  |              |               |           |          |                   |
| Rapides Regional Medical Center            | Alexandria       | ✓            | ✓             | ✓         | ✓        |                   |
| Lakeview Medical Center, LLC               | Covington        | ✓            | ✓             | ✓         | ✓        |                   |
| Bayne-Jones Army Community Hospital        | Fort Polk        |              |               |           | ✓        |                   |
| Byrd Regional Hospital                     | Leesville        |              | ✓             | ✓         | ✓        |                   |
| Minden Medical Center                      | Minden           | ✓            | ✓             | ✓         | ✓        |                   |
| Dauterive Hospital Corporation             | New Iberia       | ✓            |               | ✓         | ✓        |                   |
| Ochsner Medical Center NorthShore, LLC     | Slidell          | ✓            | ✓             | ✓         | ✓        |                   |
| Mercy Regional Medical Center              | Ville Platte     |              | ✓             | ✓         | ✓        |                   |
| <b>Maine</b>                               |                  |              |               |           |          |                   |
| Eastern Maine Medical Center               | Bangor           | ✓            | ✓             | ✓         | ✓        |                   |
| St. Joseph Hospital                        | Bangor           | ✓            |               | ✓         | ✓        |                   |
| Henrietta D. Goodall Hospital              | Sanford          | ✓            |               | ✓         | ✓        |                   |
| <b>Maryland</b>                            |                  |              |               |           |          |                   |
| Holy Cross Hospital of Silver Spring, Inc. | Silver Spring    | ✓            | ✓             | ✓         | ✓        |                   |
| <b>Massachusetts</b>                       |                  |              |               |           |          |                   |
| Athol Memorial Hospital                    | Athol            |              |               | ✓         |          |                   |
| Faulkner Hospital, Inc.                    | Boston           |              | ✓             | ✓         | ✓        |                   |
| New England Baptist Hospital               | Boston           |              |               |           | ✓        |                   |
| Fairview Hospital                          | Great Barrington |              |               | ✓         | ✓        |                   |
| Wing Memorial Hospital and Medical Centers | Palmer           |              |               | ✓         | ✓        |                   |
| Baystate Mary Lane Hospital Corporation    | Ware             |              |               | ✓         | ✓        |                   |

# The Joint Commission's Top Performers on Key Quality Measures (Cont'd)

| Hospitals by State                            | City             | Heart Attack | Heart Failure | Pneumonia | Surgical | Children's Asthma |
|---|------------------|--------------|---------------|-----------|----------|-------------------|
| <b>Michigan</b>                               |                  |              |               |           |          |                   |
| MidMichigan Medical Center Gladwin            | Gladwin          |              |               | ✓         |          |                   |
| Spectrum Health United Memorial               | Greenville       |              |               | ✓         | ✓        |                   |
| Beaumont Hospital, Grosse Pointe              | Grosse Pointe    | ✓            | ✓             | ✓         | ✓        |                   |
| Dickinson County Healthcare System            | Iron Mountain    | ✓            |               | ✓         | ✓        |                   |
| Oscar G. Johnson VA Medical Center            | Iron Mountain    |              |               | ✓         |          |                   |
| Aspirus Grand View                            | Ironwood         |              |               | ✓         |          |                   |
| Bronson LakeView Hospital                     | Paw Paw          |              |               | ✓         |          |                   |
| Aleda E. Lutz VA Medical Ctr.                 | Saginaw          |              |               | ✓         |          |                   |
| Oakwood Heritage Hospital                     | Taylor           | ✓            | ✓             | ✓         | ✓        |                   |
| Oakwood Southshore Medical Center             | Trenton          | ✓            | ✓             | ✓         | ✓        |                   |
| <b>Minnesota</b>                              |                  |              |               |           |          |                   |
| Cambridge Medical Center                      | Cambridge        |              |               | ✓         | ✓        |                   |
| New Ulm Medical Center                        | New Ulm          |              |               | ✓         | ✓        |                   |
| Fairview Northland Health Services            | Princeton        |              |               | ✓         | ✓        |                   |
| Fairview Red Wing Medical Center              | Red Wing         |              |               | ✓         | ✓        |                   |
| <b>Mississippi</b>                            |                  |              |               |           |          |                   |
| Gilmore Memorial Regional Medical Center      | Amory            |              | ✓             | ✓         |          |                   |
| Biloxi Regional Medical Center                | Biloxi           |              | ✓             | ✓         |          |                   |
| VA Gulf Coast Veterans Health Care System     | Biloxi           |              |               | ✓         |          |                   |
| Crossgates River Oaks Hospital                | Brandon          |              | ✓             | ✓         |          |                   |
| Northwest Mississippi Regional Medical Center | Clarksdale       | ✓            | ✓             | ✓         |          |                   |
| Bolivar Medical Center                        | Cleveland        |              | ✓             | ✓         | ✓        |                   |
| Garden Park Medical Center                    | Gulfport         |              |               | ✓         | ✓        |                   |
| Wesley Health System, LLC                     | Hattiesburg      | ✓            | ✓             | ✓         | ✓        |                   |
| River Oaks Hospital                           | Jackson          |              |               | ✓         |          |                   |
| VA Medical Center - G.V. (Sonny) Montgomery   | Jackson          | ✓            | ✓             | ✓         | ✓        |                   |
| Woman's Hospital                              | Jackson          |              |               |           | ✓        |                   |
| Anderson Regional Medical Center South Campus | Meridian         |              |               | ✓         |          |                   |
| Natchez Community Hospital                    | Natchez          | ✓            | ✓             | ✓         |          |                   |
| River Region Medical Center                   | Vicksburg        | ✓            | ✓             | ✓         | ✓        |                   |
| <b>Missouri</b>                               |                  |              |               |           |          |                   |
| Research Belton Hospital                      | Belton           |              |               | ✓         | ✓        |                   |
| St. Mary's Health Center                      | Jefferson City   | ✓            | ✓             | ✓         | ✓        |                   |
| SSM St. Joseph Hospital West                  | Lake Saint Louis | ✓            | ✓             | ✓         | ✓        |                   |
| Lee's Summit Medical Center                   | Lee's Summit     | ✓            | ✓             | ✓         | ✓        |                   |
| Lafayette Regional Health Center              | Lexington        |              |               | ✓         |          |                   |
| St. Francis Hospital and Health Services      | Maryville        |              |               | ✓         | ✓        |                   |
| Poplar Bluff Regional Medical Center, LLC     | Poplar Bluff     | ✓            | ✓             | ✓         |          | ✓                 |
| Heartland Regional Medical Center             | Saint Joseph     | ✓            | ✓             | ✓         | ✓        |                   |
| <b>Nebraska</b>                               |                  |              |               |           |          |                   |
| Columbus Community Hospital, Inc.             | Columbus         |              |               | ✓         | ✓        |                   |
| Alegent Health Bergan Mercy Medical Center    | Omaha            | ✓            | ✓             | ✓         | ✓        |                   |
| Alegent Health Midlands Hospital              | Papillion        | ✓            |               | ✓         | ✓        |                   |
| Regional West Medical Center                  | Scottsbluff      |              |               | ✓         |          |                   |
| <b>Nevada</b>                                 |                  |              |               |           |          |                   |
| Northeastern Nevada Regional Hospital         | Elko             | ✓            |               | ✓         | ✓        |                   |
| Southern Hills Medical Center, LLC            | Las Vegas        | ✓            | ✓             | ✓         | ✓        |                   |
| Sunrise MountainView Hospital                 | Las Vegas        | ✓            | ✓             | ✓         | ✓        |                   |
| VA Sierra Nevada Health Care System           | Reno             |              | ✓             | ✓         | ✓        |                   |
| <b>New Hampshire</b>                          |                  |              |               |           |          |                   |
| Parkland Medical Center                       | Derry            | ✓            | ✓             | ✓         | ✓        |                   |
| The Cheshire Medical Center                   | Keene            | ✓            |               | ✓         | ✓        |                   |
| St. Joseph Hospital                           | Nashua           | ✓            | ✓             | ✓         | ✓        |                   |
| Portsmouth Regional Hospital                  | Portsmouth       | ✓            |               | ✓         | ✓        |                   |

# The Joint Commission's Top Performers on Key Quality Measures (Cont'd)

| Hospitals by State  | City           | Heart Attack | Heart Failure | Pneumonia | Surgical | Children's Asthma |
|---|----------------|--------------|---------------|-----------|----------|-------------------|
| <b>New Jersey</b>   |                |              |               |           |          |                   |
| Clara Maass Medical Center  | Belleville     | ✓            | ✓             | ✓         | ✓        |                   |
| Our Lady of Lourdes Medical Center                                      | Camden         | ✓            | ✓             | ✓         | ✓        |                   |
| Bayshore Community Hospital   | Holmdel        | ✓            | ✓             | ✓         | ✓        |                   |
| Saint Barnabas Medical Center   | Livingston     | ✓            | ✓             | ✓         |          |                   |
| Monmouth Medical Center   | Long Branch    | ✓            | ✓             | ✓         |          |                   |
| Newark Beth Israel Medical Center                                       | Newark         | ✓            | ✓             | ✓         | ✓        |                   |
| Warren Hospital   | Phillipsburg   | ✓            | ✓             | ✓         | ✓        |                   |
| Princeton HealthCare System   | Princeton      | ✓            | ✓             | ✓         | ✓        |                   |
| Riverview Medical Center  | Red Bank       | ✓            | ✓             | ✓         | ✓        |                   |
| Shore Memorial Hospital   | Somers Point   | ✓            | ✓             | ✓         | ✓        |                   |
| Holy Name Medical Center  | Teaneck        | ✓            |               | ✓         | ✓        |                   |
| Community Medical Center  | Toms River     | ✓            | ✓             | ✓         | ✓        |                   |
| <b>New Mexico</b>   |                |              |               |           |          |                   |
| Lovelace Westside Hospital  | Albuquerque    |              |               | ✓         | ✓        |                   |
| Carlsbad Medical Center   | Carlsbad       |              |               | ✓         | ✓        |                   |
| <b>New York</b>   |                |              |               |           |          |                   |
| VA Healthcare Network Upstate New York at Bath                          | Bath           |              |               | ✓         |          |                   |
| Southside Hospital  | Bay Shore      | ✓            | ✓             | ✓         | ✓        |                   |
| North Shore University Hospital   | Manhasset      | ✓            | ✓             | ✓         | ✓        |                   |
| Nyack Hospital  | Nyack          | ✓            | ✓             | ✓         | ✓        |                   |
| Plainview Hospital  | Plainview      | ✓            | ✓             | ✓         | ✓        |                   |
| John T. Mather Memorial Hospital  | Port Jefferson | ✓            | ✓             | ✓         | ✓        |                   |
| St. Charles Hospital  | Port Jefferson |              |               | ✓         | ✓        |                   |
| Bon Secours Community Hospital  | Port Jervis    |              | ✓             | ✓         |          |                   |
| <b>North Carolina</b>   |                |              |               |           |          |                   |
| Roanoke-Chowan Hospital   | Ahoskie        |              | ✓             | ✓         | ✓        |                   |
| Transylvania Regional Hospital  | Brevard        |              |               | ✓         | ✓        |                   |
| Carolinas Medical Center - Mercy & Carolinas Medical Center - Pineville | Charlotte      | ✓            | ✓             | ✓         | ✓        |                   |
| VA Medical Center   | Fayetteville   |              | ✓             | ✓         |          |                   |
| Gaston Memorial Hospital  | Gastonia       | ✓            | ✓             | ✓         | ✓        |                   |
| Sandhills Regional Medical Center                                       | Hamlet         |              | ✓             | ✓         |          |                   |
| Lake Norman Regional Medical Center                                     | Mooreville     | ✓            | ✓             | ✓         |          |                   |
| The Outer Banks Hospital  | Nags Head      |              |               | ✓         | ✓        |                   |
| Rowan Regional Medical Center   | Salisbury      | ✓            | ✓             | ✓         | ✓        |                   |
| Davis Regional Medical Center   | Statesville    |              | ✓             | ✓         |          |                   |
| Heritage Hospital   | Tarboro        |              | ✓             | ✓         | ✓        | ✓                 |
| Thomasville Medical Center  | Thomasville    | ✓            | ✓             | ✓         | ✓        |                   |
| Columbus Regional Healthcare System                                     | Whiteville     |              |               | ✓         | ✓        |                   |
| Medical Park Hospital   | Winston-Salem  |              |               |           | ✓        |                   |
| <b>Ohio</b>   |                |              |               |           |          |                   |
| Mercy Franciscan Hospital - Mt. Airy                                    | Cincinnati     | ✓            | ✓             | ✓         | ✓        |                   |
| Doctors Hospital  | Columbus       | ✓            | ✓             | ✓         | ✓        |                   |
| Riverside Methodist Hospital  | Columbus       | ✓            | ✓             | ✓         | ✓        |                   |
| University Hospitals Conneaut Medical Center                            | Conneaut       |              |               | ✓         | ✓        |                   |
| Grady Memorial Hospital   | Delaware       |              |               | ✓         | ✓        |                   |
| Dublin Methodist Hospital   | Dublin         |              |               | ✓         | ✓        |                   |
| Euclid Hospital   | Euclid         |              | ✓             | ✓         | ✓        |                   |
| University Hospitals Geneva Medical Center                              | Geneva         |              |               | ✓         | ✓        |                   |
| The Fort Hamilton Hospital  | Hamilton       | ✓            | ✓             | ✓         | ✓        |                   |
| Lakewood Hospital Association   | Lakewood       | ✓            | ✓             | ✓         | ✓        |                   |
| Marion General Hospital, Inc.   | Marion         | ✓            | ✓             | ✓         | ✓        |                   |
| Mount Carmel New Albany Surgical Hospital                               | New Albany     |              |               |           | ✓        |                   |
| Allen Medical Center  | Oberlin        |              |               | ✓         | ✓        |                   |
| Mercy Willard Hospital  | Willard        |              |               |           | ✓        |                   |

# The Joint Commission's Top Performers on Key Quality Measures (Cont'd)

| Hospitals by State  | City           | Heart Attack | Heart Failure | Pneumonia | Surgical | Children's Asthma |
|---|----------------|--------------|---------------|-----------|----------|-------------------|
| <b>Oklahoma</b>   |                |              |               |           |          |                   |
| INTEGRIS Blackwell Regional Hospital                        | Blackwell      |              |               | ✓         |          |                   |
| Medical Center of Southeastern Oklahoma                     | Durant         | ✓            | ✓             | ✓         |          |                   |
| INTEGRIS Baptist Regional Health Center                     | Miami          |              |               | ✓         | ✓        |                   |
| Ponca City Medical Center                                   | Ponca City     |              |               | ✓         | ✓        |                   |
| SouthCrest Hospital   | Tulsa          | ✓            | ✓             | ✓         | ✓        |                   |
| <b>Oregon</b>   |                |              |               |           |          |                   |
| Willamette Valley Medical Center                            | McMinnville    |              |               | ✓         | ✓        |                   |
| McKenzie-Willamette Regional Medical Center Associates, LLC | Springfield    | ✓            | ✓             | ✓         | ✓        |                   |
| <b>Pennsylvania</b>   |                |              |               |           |          |                   |
| CH Hospital of Allentown, LLC                               | Allentown      |              |               |           | ✓        |                   |
| Lehigh Valley Hospital                                      | Allentown      | ✓            | ✓             | ✓         | ✓        |                   |
| VA Medical Center - James E. Van Zandt                      | Altoona        |              |               | ✓         |          |                   |
| Bryn Mawr Hospital  | Bryn Mawr      | ✓            | ✓             | ✓         | ✓        |                   |
| Holy Spirit Hospital  | Camp Hill      | ✓            | ✓             | ✓         |          |                   |
| Carlisle HMA, LLC   | Carlisle       | ✓            | ✓             | ✓         |          |                   |
| Erie VA Medical Center                                      | Erie           |              |               |           | ✓        |                   |
| UPMC Bedford Memorial                                       | Everett        |              |               | ✓         | ✓        |                   |
| Gettysburg Hospital   | Gettysburg     | ✓            | ✓             | ✓         | ✓        |                   |
| UPMC Horizon  | Greenville     | ✓            | ✓             | ✓         | ✓        |                   |
| Lancaster Regional Medical Center                           | Lancaster      | ✓            | ✓             | ✓         |          |                   |
| Heart of Lancaster Regional Medical Center                  | Lititz         |              |               | ✓         | ✓        |                   |
| UPMC McKeesport   | McKeesport     | ✓            | ✓             | ✓         | ✓        |                   |
| Riddle Memorial Hospital                                    | Media          | ✓            | ✓             | ✓         | ✓        |                   |
| Mercy Suburban Hospital                                     | Norristown     | ✓            | ✓             | ✓         | ✓        |                   |
| Chestnut Hill Hospital                                      | Philadelphia   | ✓            | ✓             | ✓         | ✓        |                   |
| UPMC St. Margaret   | Pittsburgh     | ✓            | ✓             | ✓         | ✓        |                   |
| Grand View Hospital   | Sellersville   | ✓            | ✓             | ✓         | ✓        |                   |
| Jennersville Regional Hospital                              | West Grove     |              |               | ✓         | ✓        |                   |
| Lankenau Hospital   | Wynnewood      | ✓            | ✓             | ✓         | ✓        |                   |
| <b>South Carolina</b>                                       |                |              |               |           |          |                   |
| AnMed Health Medical Center                                 | Anderson       | ✓            | ✓             | ✓         | ✓        |                   |
| Marlboro Park Hospital                                      | Bennettsville  |              | ✓             | ✓         |          |                   |
| Trident Health System                                       | Charleston     | ✓            | ✓             | ✓         |          |                   |
| Chester Regional Medical Center                             | Chester        |              | ✓             | ✓         |          |                   |
| Moncrief Army Community Hospital                            | Columbia       |              |               | ✓         |          |                   |
| Palmetto Health Baptist                                     | Columbia       |              | ✓             | ✓         | ✓        |                   |
| William Jennings Bryan Dorn VA Medical Center               | Columbia       |              | ✓             | ✓         | ✓        |                   |
| Springs Memorial Hospital                                   | Lancaster      | ✓            | ✓             | ✓         | ✓        |                   |
| Grand Strand Regional Medical Center, LLC                   | Myrtle Beach   | ✓            | ✓             | ✓         | ✓        |                   |
| Colleton Medical Center                                     | Walterboro     |              | ✓             | ✓         | ✓        |                   |
| <b>South Dakota</b>   |                |              |               |           |          |                   |
| Avera Queen of Peace Hospital                               | Mitchell       |              |               | ✓         | ✓        |                   |
| Avera Heart Hospital of South Dakota                        | Sioux Falls    | ✓            | ✓             |           | ✓        |                   |
| <b>Tennessee</b>  |                |              |               |           |          |                   |
| Parkridge Medical Center, Inc.                              | Chattanooga    | ✓            | ✓             | ✓         | ✓        |                   |
| Dyersburg Hospital Corporation                              | Dyersburg      | ✓            | ✓             | ✓         | ✓        |                   |
| Takoma Regional Hospital                                    | Greeneville    |              |               | ✓         | ✓        |                   |
| Roane Medical Center  | Harriman       |              |               | ✓         | ✓        |                   |
| Summit Medical Center                                       | Hermitage      | ✓            | ✓             | ✓         | ✓        |                   |
| Grandview Medical Center                                    | Jasper         |              |               | ✓         |          |                   |
| Jefferson Memorial Hospital                                 | Jefferson City |              | ✓             | ✓         |          |                   |
| Franklin Woods Community Hospital                           | Johnson City   |              |               | ✓         |          |                   |
| Indian Path Medical Center                                  | Kingsport      | ✓            | ✓             | ✓         | ✓        |                   |



# The Joint Commission's Top Performers on Key Quality Measures (Cont'd)

| Hospitals by State                              | City          | Heart Attack | Heart Failure | Pneumonia | Surgical | Children's Asthma |
|---|---------------|--------------|---------------|-----------|----------|-------------------|
| <b>Tennessee (Cont'd)</b>                       |               |              |               |           |          |                   |
| Henderson County Community Hospital             | Lexington     |              |               | ✓         |          |                   |
| Martin Hospital Corporation                     | Martin        |              |               | ✓         | ✓        |                   |
| McKenzie Tennessee Hospital Company, LLC        | McKenzie      |              |               | ✓         | ✓        |                   |
| VA Medical Center - James H. Quillen            | Mountain Home | ✓            | ✓             | ✓         |          |                   |
| Baptist Hospital of Cocke County                | Newport       |              |               | ✓         |          |                   |
| Heritage Medical Center                         | Shelbyville   |              |               | ✓         | ✓        |                   |
| StoneCrest Medical Center                       | Smyrna        | ✓            |               | ✓         |          |                   |
| Methodist Healthcare-Fayette Hospital           | Somerville    |              |               | ✓         |          |                   |
| NorthCrest Medical Center                       | Springfield   | ✓            | ✓             | ✓         | ✓        |                   |
| Harton Regional Medical Center                  | Tullahoma     | ✓            | ✓             | ✓         |          |                   |
| Baptist Memorial Hospital - Union City          | Union City    |              |               | ✓         |          |                   |
| <b>Texas</b>                                    |               |              |               |           |          |                   |
| Big Bend Regional Medical Center                | Alpine        |              |               | ✓         | ✓        |                   |
| Dell Children's Medical Center of Central Texas | Austin        |              |               |           |          | ✓                 |
| Seton Southwest Hospital                        | Austin        |              |               |           | ✓        |                   |
| St. David's North Austin Medical Center         | Austin        | ✓            | ✓             | ✓         | ✓        |                   |
| Texas Health Harris Methodist Hospital Cleburne | Cleburne      |              | ✓             | ✓         | ✓        |                   |
| Baylor Heart and Vascular Center, LLP           | Dallas        | ✓            | ✓             |           | ✓        |                   |
| Methodist Charlton Medical Center               | Dallas        | ✓            | ✓             | ✓         |          |                   |
| Memorial Hospital                               | Dumas         |              |               | ✓         | ✓        |                   |
| Las Palmas Del Sol Healthcare                   | El Paso       | ✓            | ✓             | ✓         | ✓        |                   |
| Plaza Medical Center of Fort Worth              | Fort Worth    | ✓            | ✓             | ✓         | ✓        |                   |
| Baylor Medical Center at Garland                | Garland       | ✓            | ✓             | ✓         | ✓        |                   |
| Baylor Regional Medical Center at Grapevine     | Grapevine     | ✓            | ✓             | ✓         | ✓        |                   |
| Memorial Hermann Memorial City Medical Center   | Houston       | ✓            | ✓             | ✓         | ✓        |                   |
| Texas Orthopedic Hospital Ltd.                  | Houston       |              |               |           | ✓        |                   |
| The Woman's Hospital of Texas                   | Houston       |              |               |           | ✓        |                   |
| West Houston Medical Center                     | Houston       | ✓            | ✓             | ✓         | ✓        |                   |
| Huntsville Memorial Hospital                    | Huntsville    |              |               | ✓         | ✓        |                   |
| Las Colinas Medical Center                      | Irving        | ✓            | ✓             | ✓         | ✓        |                   |
| South Texas Regional Medical Center             | Jourdanton    |              |               | ✓         | ✓        |                   |
| Texas Health Presbyterian Hospital Kaufman      | Kaufman       |              |               | ✓         | ✓        |                   |
| Woodland Heights Medical Center                 | Lufkin        | ✓            | ✓             | ✓         | ✓        |                   |
| Seton Edgar B. Davis Hospital                   | Luling        |              |               | ✓         |          |                   |
| Medical Center of McKinney                      | McKinney      | ✓            | ✓             | ✓         |          |                   |
| Dallas Regional Medical Center                  | Mesquite      | ✓            | ✓             | ✓         |          |                   |
| Parkview Regional Hospital                      | Mexia         |              |               | ✓         |          |                   |
| Baylor Regional Medical Center at Plano         | Plano         |              |               | ✓         | ✓        |                   |
| Texas Heart Hospital of the Southwest           | Plano         | ✓            | ✓             |           | ✓        |                   |
| St. David's Round Rock Medical Center           | Round Rock    | ✓            | ✓             | ✓         | ✓        |                   |
| Lake Pointe Medical Center                      | Rowlett       | ✓            | ✓             | ✓         | ✓        |                   |
| San Angelo Community Medical Center             | San Angelo    | ✓            |               | ✓         | ✓        |                   |
| Memorial Hermann Sugar Land Hospital            | Sugar Land    |              |               | ✓         | ✓        |                   |
| Rolling Plains Memorial Hospital                | Sweetwater    |              |               | ✓         |          |                   |
| Mainland Medical Center*                        | Texas City    | ✓            | ✓             | ✓         | ✓        |                   |
| Weatherford Regional Medical Center             | Weatherford   |              |               | ✓         | ✓        |                   |
| <b>Utah</b>                                     |               |              |               |           |          |                   |
| Mountain View Hospital                          | Payson        | ✓            |               | ✓         | ✓        |                   |
| <b>Vermont</b>                                  |               |              |               |           |          |                   |
| Northwestern Medical Center, Inc.               | Saint Albans  |              |               | ✓         |          |                   |
| <b>Virginia</b>                                 |               |              |               |           |          |                   |
| LewisGale Hospital Montgomery                   | Blacksburg    | ✓            |               | ✓         | ✓        |                   |
| Augusta Health                                  | Fishersville  | ✓            | ✓             | ✓         |          |                   |
| Twin County Regional Hospital                   | Galax         |              | ✓             | ✓         | ✓        |                   |

\*Acquired by Clear Lake Regional Medical Center in April 2011

# The Joint Commission's Top Performers on Key Quality Measures (Cont'd)

| Hospitals by State                                       | City           | Heart Attack | Heart Failure | Pneumonia | Surgical | Children's Asthma |
|--|----------------|--------------|---------------|-----------|----------|-------------------|
| <b>Virginia (Cont'd)</b>                                 |                |              |               |           |          |                   |
| Sentara CarePlex Hospital                                | Hampton        | ✓            | ✓             | ✓         | ✓        |                   |
| John Randolph Medical Center                             | Hopewell       | ✓            | ✓             | ✓         | ✓        |                   |
| Russell County Medical Center                            | Lebanon        |              |               | ✓         |          |                   |
| LewisGale Hospital Alleghany                             | Low Moor       |              |               | ✓         | ✓        |                   |
| Riverside Regional Medical Center                        | Newport News   | ✓            | ✓             | ✓         | ✓        |                   |
| Pulaski Community Hospital                               | Pulaski        | ✓            |               | ✓         | ✓        |                   |
| CJW Medical Center                                       | Richmond       | ✓            | ✓             | ✓         | ✓        |                   |
| LewisGale Medical Center, LLC                            | Salem          | ✓            | ✓             | ✓         | ✓        |                   |
| Sentara Bayside Hospital                                 | Virginia Beach | ✓            | ✓             | ✓         | ✓        |                   |
| <b>Washington</b>  |                |              |               |           |          |                   |
| Providence Centralia Hospital                            | Centralia      | ✓            | ✓             | ✓         | ✓        |                   |
| Valley Hospital and Medical Center                       | Spokane Valley |              |               | ✓         | ✓        |                   |
| Toppenish Community Hospital                             | Toppenish      |              |               | ✓         |          |                   |
| Walla Walla General Hospital                             | Walla Walla    |              |               | ✓         | ✓        |                   |
| Yakima Regional Medical and Cardiac Center Yakima        | Yakima         | ✓            | ✓             | ✓         |          |                   |
| <b>West Virginia</b>                                     |                |              |               |           |          |                   |
| United Hospital Center                                   | Bridgeport     | ✓            | ✓             | ✓         | ✓        |                   |
| Fairmont General Hospital, Inc.                          | Fairmont       | ✓            | ✓             | ✓         | ✓        |                   |
| Williamson Memorial Hospital                             | Williamson     |              |               | ✓         |          |                   |
| <b>Wisconsin</b>   |                |              |               |           |          |                   |
| Langlade Hospital  | Antigo         |              |               | ✓         | ✓        |                   |
| Aurora Health Care Southern Lakes, Inc.                  | Burlington     | ✓            |               | ✓         | ✓        |                   |
| Mayo Clinic Health System - Eau Claire Hospital, Inc.    | Eau Claire     | ✓            |               | ✓         | ✓        |                   |
| William S. Middleton Memorial Veterans Hospital          | Madison        | ✓            | ✓             | ✓         | ✓        |                   |
| Good Samaritan Health Center of Merrill, Wisconsin, Inc. | Merrill        |              |               | ✓         | ✓        |                   |
| River Falls Area Hospital                                | River Falls    |              |               |           | ✓        |                   |
| Aurora Health Care Central, Inc.                         | Sheboygan      | ✓            |               | ✓         | ✓        |                   |
| <b>Wyoming</b>   |                |              |               |           |          |                   |
| Platte County Memorial Hospital                          | Wheatland      |              |               | ✓         |          |                   |

# Accountability Measures Summary

Accountability measures are evidence-based care processes closely linked to positive patient outcomes. These measures are most suitable for use in programs that hold providers accountable for their performance to external oversight entities and to the public. Most of the measures used through 2010 are categorized as accountability measures; there are six non-accountability measures: smoking cessation advice (heart attack care, heart failure care and pneumonia care); discharge instructions and LVS function assessment (heart failure care); and antibiotic within six hour of arrival (pneumonia care). For more information, see “A Special Focus on Accountability Measures” on page 29 and Appendices 2, 3 and 4.

Composite measures combine the results of related measures into a single percentage rating calculated by adding up the number of times recommended evidence-based care was provided to patients (measure numerator) and dividing this sum by the total number of opportunities to provide this care (measure denominator).

**Composite for accountability measures:** The 2010 composite for accountability measures calculation is derived only from the 22 accountability measures for each of four measure sets (heart attack care, pneumonia care, surgical care and children’s asthma care). The accountability composite calculation reflected in this report is the same calculation as that provided on Quality Check (beginning with third quarter 2010 data).

**The results shown in tables 1 and 2 are composite results only for the 22 2010 accountability measures; non-accountability measures have been excluded.**

*Note: There is no accountability composite for heart failure care since there is only one heart failure accountability measure. A composite must have at least two measures. However, the composite for all measures results include the one heart failure measure. For more information, see “Note on Calculations and Methodology” on page 32.*

See Glossary for definitions.

**Table 1: Composite results for accountability measures**

| Accountability composite measure sets | 2006  | 2007  | 2008  | 2009  | 2010  |
|---------------------------------------|-------|-------|-------|-------|-------|
| Heart attack care composite           | 94.4% | 95.7% | 96.8% | 97.7% | 98.3% |
| Pneumonia care composite              | 87.1% | 90.3% | 89.8% | 92.9% | 94.6% |
| Surgical care composite               | 86.2% | 88.9% | 93.5% | 95.8% | 96.9% |
| Children’s asthma care composite      | N/A   | 70.7% | 79.8% | 88.1% | 92.3% |
| Overall                               | 88.2% | 90.0% | 93.1% | 95.4% | 96.6% |

**Table 2: Percentage of hospitals achieving composite rates greater than 90 percent for accountability measures**

| Accountability composite measure sets | 2006  | 2007  | 2008  | 2009  | 2010  |
|---------------------------------------|-------|-------|-------|-------|-------|
| Heart attack care composite           | 76.7% | 85.0% | 91.1% | 94.5% | 95.6% |
| Pneumonia care composite              | 33.9% | 57.0% | 55.8% | 75.5% | 84.0% |
| Surgical care composite               | 30.2% | 42.1% | 74.4% | 89.5% | 93.9% |
| Children’s asthma care composite      | N/A   | 2.6%  | 21.3% | 50.8% | 72.7% |
| Overall                               | 41.5% | 60.0% | 70.8% | 85.9% | 91.7% |

# National Performance Summary

Results are determined by the number of times the hospital met the measure (such as giving aspirin at arrival for heart attack patients) divided by the number of opportunities (eligible patients for the measure) the hospital had during the year. Results are expressed as a percentage.

All improvements or decreases in performance are statistically significant. Many of the smaller percentage improvements occurred within large patient populations, meaning that significantly more patients received a treatment. In some cases, performance was already quite high and there was less room for improvement.

Composite measures combine the results of all individual process measures on a similar medical condition into a single percentage rating calculated by adding up the number of times recommended evidence-based care was provided to patients and dividing this sum by the total number of opportunities to provide this care.

**Composite for all measures:** The composite for all measures calculation is derived from both accountability and non-accountability measures for each measure set. These composite results have historically been provided in previous annual reports, allowing them to be tracked from year-to-year.

See Glossary for definitions.

**Table 3: Heart attack care measure results**

| Performance measure                    | 2006  | 2007  | 2008  | 2009  | 2010  | Improvement since inception (percentage points) |
|--|-------|-------|-------|-------|-------|---|
| <i>Heart attack care composite</i>     | 94.4% | 95.8% | 96.7% | 97.8% | 98.4% | 11.5%   |
| Aspirin at arrival                     | 96.7% | 97.4% | 97.9% | 98.4% | 98.9% | 5.9%  |
| Aspirin at discharge                   | 96.6% | 97.2% | 97.7% | 98.4% | 98.8% | 6.8%  |
| ACEI or ARB at discharge               | 86.7% | 91.6% | 93.9% | 95.5% | 96.6% | 20.8%   |
| Smoking cessation advice               | 96.6% | 98.2% | 98.9% | 99.4% | 99.6% | 33.0%   |
| Beta-blocker at discharge              | 96.2% | 97.3% | 97.8% | 98.3% | 98.6% | 11.3%   |
| Fibrinolytic therapy within 30 minutes | 42.8% | 51.4% | 52.4% | 55.2% | 60.5% | 21.7%   |
| PCI therapy within 90 minutes          | 67.7% | 72.3% | 81.6% | 87.4% | 91.2% | 22.9%   |

■ accountability measure  
 ■ non-accountability measure  
 ■ outcomes measure  
 ■ test measure

# National Performance Summary (Cont'd)

**Table 4: Heart failure care measure results**

| Performance measure                 | 2006  | 2007  | 2008  | 2009  | 2010  | Improvement since inception (percentage points) |
|-------------------------------------|-------|-------|-------|-------|-------|---|
| <i>Heart failure care composite</i> | 84.1% | 88.4% | 91.6% | 93.9% | 95.5% | 35.8%   |
| Discharge instructions              | 70.3% | 77.5% | 83.4% | 87.5% | 90.8% | 59.9%   |
| LVS assessment                      | 93.4% | 95.4% | 97.0% | 98.1% | 98.8% | 17.3%   |
| Smoking cessation advice            | 92.1% | 95.8% | 97.6% | 98.6% | 99.1% | 56.9%   |
| ACEI or ARB at discharge            | 85.6% | 90.1% | 92.7% | 94.3% | 96.5% | 22.3%   |

In the following table, the two measures on antibiotics to ICU patients and antibiotics to non-ICU patients are one measure for the Centers for Medicare & Medicaid Services, although they are separated for reporting to The Joint Commission.

**Table 5: Pneumonia care measure results**

| Performance measure                    | 2006  | 2007  | 2008  | 2009  | 2010  | Improvement since inception (percentage points) |
|--|-------|-------|-------|-------|-------|---|
| <i>Pneumonia care composite</i>        | 87.4% | 90.5% | 92.9% | 93.7% | 95.2% | 22.9%   |
| Pneumococcal vaccination               | 75.9% | 84.0% | 89.0% | 92.8% | 94.8% | 64.6%   |
| Blood cultures in ICU                  | 90.4% | 92.8% | 93.9% | 95.5% | 96.9% | 6.5%  |
| Blood cultures in ED                   | 90.1% | 91.1% | 93.2% | 95.0% | 96.4% | 6.3%  |
| Antibiotic within six hours of arrival | N/A   | N/A   | 93.6% | 94.6% | 95.8% | 2.2%  |
| Smoking cessation advice               | 89.4% | 93.7% | 96.0% | 97.6% | 98.4% | 61.2%   |
| Antibiotics to ICU patients            | 59.8% | 63.9% | 60.3% | 67.5% | 77.2% | 27.0%   |
| Antibiotics to non-ICU patients        | 88.8% | 91.9% | 93.0% | 94.5% | 95.2% | 11.2%   |
| Influenza vaccination*                 | N/A   | 79.5% | 85.7% | 88.9% | 92.9% | 13.4%   |

\*Influenza vaccination based on flu season rather than calendar year

|                          |                              |                    |                |
|--------------------------|------------------------------|--------------------|----------------|
| ■ accountability measure | ■ non-accountability measure | ■ outcomes measure | ■ test measure |
|--------------------------|------------------------------|--------------------|----------------|

# National Performance Summary (Cont'd)

The overall measure and rates are indicated in **bold**; the stratified measures (by specific surgical procedures) are indicated in regular type. The first three measures listed (antibiotics within one hour before the first surgical cut, appropriate prophylactic antibiotics, and stopping antibiotics within 24 hours) report rates on seven specific surgical procedures, as well as the overall measure rate.

**Table 6: Surgical care measure results**

| Performance measure  | 2006         | 2007         | 2008         | 2009         | 2010         | Improvement since inception (percentage points) |
|--|--------------|--------------|--------------|--------------|--------------|---|
| <b><i>Surgical care composite</i></b>                            | <b>86.2%</b> | <b>88.9%</b> | <b>93.5%</b> | <b>95.8%</b> | <b>96.4%</b> | <b>14.3%</b>                                    |
| <b>Antibiotics within one hour before the first surgical cut</b> | <b>86.6%</b> | <b>89.5%</b> | <b>93.5%</b> | <b>96.2%</b> | <b>97.4%</b> | <b>15.6%</b>                                    |
| For CABG surgery   | 87.6%        | 89.5%        | 94.0%        | 96.8%        | 97.8%        | 12.6%   |
| For cardiac surgery (other than CABG)                            | 87.1%        | 89.0%        | 93.7%        | 96.6%        | 97.6%        | 13.8%   |
| For colon surgery  | 78.0%        | 82.4%        | 87.6%        | 91.8%        | 94.7%        | 22.5%   |
| For hip joint replacement surgery                                | 86.9%        | 89.4%        | 93.4%        | 96.3%        | 97.5%        | 16.2%   |
| For hysterectomy surgery   | 86.9%        | 89.8%        | 93.7%        | 96.4%        | 97.5%        | 15.1%   |
| For knee joint replacement surgery                               | 90.4%        | 92.5%        | 95.3%        | 97.2%        | 98.0%        | 12.9%   |
| For vascular surgery   | 81.1%        | 85.3%        | 90.6%        | 94.6%        | 96.0%        | 20.8%   |
| <b>Appropriate prophylactic antibiotics</b>                      | <b>N/A</b>   | <b>94.9%</b> | <b>96.8%</b> | <b>97.7%</b> | <b>97.8%</b> | <b>2.9%</b>                                     |
| For CABG surgery   | N/A          | 97.8%        | 98.7%        | 99.5%        | 99.6%        | 1.8%  |
| For cardiac surgery (other than CABG)                            | N/A          | 96.2%        | 99.1%        | 99.7%        | 99.8%        | 3.6%  |
| For colon surgery  | N/A          | 75.7%        | 84.3%        | 87.8%        | 91.4%        | 15.7%   |
| For hip joint replacement surgery                                | N/A          | 98.0%        | 98.7%        | 99.2%        | 99.5%        | 1.5%  |
| For hysterectomy surgery   | N/A          | 93.7%        | 96.1%        | 96.3%        | 94.5%        | 0.8%  |
| For knee joint replacement surgery                               | N/A          | 98.2%        | 98.8%        | 99.3%        | 99.5%        | 1.3%  |
| For vascular surgery   | N/A          | 95.3%        | 96.6%        | 97.8%        | 98.2%        | 2.9%  |
| <b>Stopping antibiotics within 24 hours</b>                      | <b>79.1%</b> | <b>85.6%</b> | <b>90.5%</b> | <b>93.5%</b> | <b>95.7%</b> | <b>22.2%</b>                                    |
| For CABG surgery   | 87.3%        | 89.7%        | 93.6%        | 95.5%        | 97.1%        | 27.4%   |
| For cardiac surgery (other than CABG)                            | 86.2%        | 89.7%        | 92.6%        | 94.8%        | 96.5%        | 33.8%   |
| For colon surgery  | 65.3%        | 74.8%        | 80.4%        | 84.9%        | 90.8%        | 29.3%   |
| For hip joint replacement surgery                                | 74.9%        | 84.0%        | 89.8%        | 93.6%        | 95.9%        | 26.7%   |
| For hysterectomy surgery   | 89.1%        | 90.2%        | 92.8%        | 94.8%        | 96.3%        | 8.3%  |
| For knee joint replacement surgery                               | 76.2%        | 85.4%        | 91.3%        | 94.7%        | 96.7%        | 27.2%   |
| For vascular surgery   | 67.3%        | 77.0%        | 83.0%        | 88.2%        | 91.9%        | 26.9%   |
| Cardiac patients with 9 a.m. postoperative blood glucose         | N/A          | N/A          | 89.9%        | 92.7%        | 94.1%        | 4.2%  |
| Patients with appropriate hair removal                           | N/A          | N/A          | 97.4%        | 99.2%        | 99.7%        | 2.3%  |
| Beta-blocker patients who received beta-blocker perioperatively  | N/A          | N/A          | 92.0%        | 91.5%        | 94.4%        | 2.4%  |
| Prescribing VTE medicine/treatment                               | N/A          | 87.2%        | 92.1%        | 93.7%        | 95.2%        | 8.0%  |
| Receiving VTE medicine/treatment                                 | N/A          | 83.2%        | 89.6%        | 91.9%        | 93.7%        | 10.5%   |
| Urinary catheter removed   | N/A          | N/A          | N/A          | N/A          | 91.3%        | N/A   |

■ accountability measure  
 ■ non-accountability measure  
 ■ outcomes measure  
 ■ test measure

# National Performance Summary (Cont'd)

The overall measure and rates are indicated in **bold**; the stratified measures (by specific surgical procedures) are indicated in regular type.

**Table 7: Children's asthma care measure results**

| Performance measure                                  | 2008         | 2009         | 2010          | Improvement since inception (percentage points) |
|--|--------------|--------------|---------------|---|
| <i>Children's asthma care composite</i>              | <i>79.8%</i> | <i>88.1%</i> | <i>92.3%</i>  | <i>12.5%</i>                                    |
| <b>Relievers for inpatient asthma</b>                | <b>99.8%</b> | <b>99.9%</b> | <b>100.0%</b> | <b>0.2%</b>                                     |
| For age 2-4 years                                    | 99.8%        | 99.9%        | 100.0%        | 0.2%  |
| For age 5-12 years                                   | 99.8%        | 99.9%        | 100.0%        | 0.2%  |
| For age 13-17 years                                  | 99.8%        | 99.9%        | 99.9%         | 0.2%  |
| <b>Systemic corticosteroids for inpatient asthma</b> | <b>99.1%</b> | <b>99.5%</b> | <b>99.6%</b>  | <b>0.5%</b>                                     |
| For age 2-4 years                                    | 98.8%        | 99.4%        | 99.6%         | 0.8%  |
| For age 5-12 years                                   | 99.3%        | 99.5%        | 99.7%         | 0.4%  |
| For age 13-17 years                                  | 99.0%        | 99.5%        | 99.4%         | 0.4%  |
| <b>Home management plan of care</b>                  | <b>40.6%</b> | <b>64.9%</b> | <b>77.1%</b>  | <b>36.5%</b>                                    |

accountability measure
  non-accountability measure
  outcomes measure
  test measure

# National Performance Summary (Cont'd)

A different kind of measure type – a ratio measure – is included in the inpatient psychiatric services measure set. A ratio tells how one number is related to another. For example, counting a group of people and then referring to the ratio of men to women. This measure set contains two ratio measures: physical restraint hours per 1,000 patient hours and seclusion hours per 1,000 patient hours. In addition, these two measures are stratified by age groups 1-12 years, 13-17 years, 18-64 years, and age 65 and above.

High rates are preferred in this measure set for all measures except the three measures on multiple antipsychotic medications, physical restraint and seclusion, for which a low rate or ratio reflects better performance.

The overall measure and rates are indicated in **bold**; the stratified measures (by specific age ranges of patients) are indicated in regular type.

**Table 8: Inpatient psychiatric services measure results**

| Performance measure   | 2009         | 2010         | Improvement since inception (percentage points) |
|---|--------------|--------------|---|
| <i>Inpatient psychiatric services composite</i>             | <b>82.4%</b> | <b>87.6%</b> | 5.2%  |
| <b>Admission screening</b>                                  | <b>88.4%</b> | <b>92.0%</b> | 3.7%  |
| For age 1-12 years  | 90.4%        | 93.7%        | 3.3%  |
| For age 13-17 years   | 91.2%        | 94.3%        | 3.2%  |
| For age 18-64 years   | 87.2%        | 90.8%        | 3.5%  |
| For age 65 and above  | 87.4%        | 92.7%        | 5.3%  |
| <b>Multiple antipsychotic medications*</b>                  | <b>11.8%</b> | <b>11.2%</b> | -0.6%   |
| For age 1-12 years  | 5.1%         | 4.4%         | -0.7%   |
| For age 13-17 years   | 5.9%         | 5.7%         | -0.2%   |
| For age 18-64 years   | 14.8%        | 14.2%        | -0.7%   |
| For age 65 and above  | 9.4%         | 8.7%         | -0.7%   |
| <b>Justification for multiple antipsychotic medications</b> | <b>28.3%</b> | <b>39.5%</b> | 11.1%   |
| For age 1-12 years  | 30.8%        | 37.1%        | 6.2%  |
| For age 13-17 years   | 29.4%        | 33.9%        | 4.6%  |
| For age 18-64 years   | 28.4%        | 40.5%        | 12.1%   |
| For age 65 and above  | 25.6%        | 37.5%        | 11.9%   |
| <b>Continuing care plan</b>                                 | <b>85.7%</b> | <b>90.8%</b> | 5.1%  |
| For age 1-12 years  | 87.1%        | 91.4%        | 4.3%  |
| For age 13-17 years   | 86.1%        | 91.5%        | 5.4%  |
| For age 18-64 years   | 85.9%        | 91.0%        | 5.1%  |
| For age 65 and above  | 82.4%        | 87.3%        | 4.9%  |
| <b>Continuing care plan transmitted</b>                     | <b>74.1%</b> | <b>82.8%</b> | 8.7%  |
| For age 1-12 years  | 76.2%        | 83.7%        | 7.5%  |
| For age 13-17 years   | 73.0%        | 82.8%        | 9.9%  |
| For age 18-64 years   | 74.4%        | 83.0%        | 8.6%  |
| For age 65 and above  | 72.2%        | 80.6%        | 8.4%  |

\*For this measure, a low rate is preferred

■ accountability measure   ■ non-accountability measure   ■ outcomes measure   ■ test measure



# National Performance Summary (Cont'd)

In the table below, for the overall measures (in bold), the number of hospitals reporting these data ranged from 304-328. For the stratified measures (by specific age ranges of patients), the number of hospitals reporting these data ranged from 156-322.

The overall measure and rates are indicated in **bold**; the stratified measures (by specific age ranges of patients) are indicated in regular type.

**Table 9: Inpatient psychiatric services ratio measure results**

| Performance measure  | 2009        |              |                                   | 2010        |              |                                   |
|--|-------------|--------------|-----------------------------------|-------------|--------------|-----------------------------------|
|  | Median      | Maximum      | Percent of hospitals with 0 hours | Median      | Maximum      | Percent of hospitals with 0 hours |
| <i>Inpatient Psychiatric Services</i>                      |             |              |                                   |             |              |                                   |
| <b>Physical restraint (hours per 1,000 patient hours)*</b> | <b>0.11</b> | <b>10.27</b> | <b>8.6%</b>                       | <b>0.09</b> | <b>5.29</b>  | <b>5.8%</b>                       |
| For age 1-12 years   | 0.14        | 7.02         | 13.2%                             | 0.18        | 5.19         | 8.2%                              |
| For age 13-17 years  | 0.16        | 7.08         | 9.3%                              | 0.14        | 3.30         | 5.9%                              |
| For age 18-64 years  | 0.07        | 10.27        | 10.6%                             | 0.06        | 3.85         | 7.6%                              |
| For age 65 and above                                       | 0.00        | 22.93        | 51.0%                             | 0.00        | 23.14        | 49.3%                             |
| <b>Seclusion (hours per 1,000 patient hours)*</b>          | <b>0.07</b> | <b>2.87</b>  | <b>16.7%</b>                      | <b>0.06</b> | <b>10.06</b> | <b>16.8%</b>                      |
| For age 1-12 years   | 0.21        | 6.50         | 17.9%                             | 0.18        | 3.98         | 16.7%                             |
| For age 13-17 years  | 0.07        | 8.29         | 24.2%                             | 0.08        | 7.65         | 20.3%                             |
| For age 18-64 years  | 0.04        | 2.26         | 22.6%                             | 0.04        | 10.83        | 22.1%                             |
| For age 65 and above                                       | 0.00        | 3.23         | 73.2%                             | 0.00        | 9.75         | 76.0%                             |

\*For this measure, a low ratio is preferred.

|                          |                              |                    |                |
|--------------------------|------------------------------|--------------------|----------------|
| ■ accountability measure | ■ non-accountability measure | ■ outcomes measure | ■ test measure |
|--------------------------|------------------------------|--------------------|----------------|

# National Performance Summary (Cont'd)

In the following table, incidence of potentially preventable VTE is an outcomes measure and is not included in the measure composite results.

**Table 10: VTE (venous thromboembolism) care measure results**

| Performance measure                                | 2010  |
|--|-------|
| <i>Venous thromboembolism (VTE) care composite</i> | 82.7% |
| VTE medicine/treatment                             | 84.5% |
| VTE medicine/treatment in ICU                      | 89.5% |
| VTE patients with overlap therapy                  | 80.7% |
| VTE patients with UFH monitoring                   | 88.8% |
| VTE warfarin discharge instructions                | 53.7% |
| Incidence of potentially preventable VTE           | 13.3% |

**Table 11: Stroke care measure results**

| Performance measure                                     | 2010  |
|---|-------|
| <i>Stroke care composite</i>                            | 92.8% |
| VTE prophylaxis   | 88.1% |
| Discharged on antithrombotic therapy                    | 98.7% |
| Anticoagulation therapy for atrial fibrillation/flutter | 94.2% |
| Thrombolytic therapy                                    | 61.0% |
| Antithrombotic therapy by end of hospital day two       | 97.3% |
| Discharged on statin medication                         | 92.8% |
| Stroke education  | 82.1% |
| Assessed for rehabilitation                             | 97.0% |

The following table shows the results for a set of test measures for perinatal care. These measures are still being evaluated against the accountability criteria. The measures on Cesarean section and newborn bloodstream infections are outcomes measures as well as test measures.

**Table 12: Perinatal care test measure results**

| Performance measure             | 2010  |
|---------------------------------|-------|
| <i>Perinatal care composite</i> | 48.1% |
| Elective delivery               | 19.0% |
| Cesarean section                | 27.0% |
| Antenatal steroids              | 64.0% |
| Newborn bloodstream infections  | 0.3%  |
| Exclusive breast milk feeding   | 40.5% |

■ accountability measure   ■ non-accountability measure   ■ outcomes measure   ■ test measure

# National Performance Summary (Cont'd)

The following table shows the percentage of hospitals achieving rates of performance of 90 percent or greater on a measure. The last column is reported as percentage points - the difference on a percentage scale between two rates, in this case 2009 performance versus 2010 performance.

**Table 13: Percentage of hospitals achieving 90 percent or greater performance**

| Performance measure   | 2008 High<br>(percentage<br>>90) | 2009 High<br>(percentage<br>>90) | 2010 High<br>(percentage<br>>90) | 2009-2010<br>difference<br>(percentage) |
|---|----------------------------------|----------------------------------|----------------------------------|---|
| Relievers for inpatient asthma (Children's Asthma)                        | N/A                              | 100.0                            | 100.0                            | 0.0                                     |
| Systemic corticosteroids for inpatient asthma (Children's Asthma)         | N/A                              | 100.0                            | 100.0                            | 0.0                                     |
| Smoking cessation advice (Heart Attack)                                   | 98.0                             | 99.3                             | 99.8                             | 0.5                                     |
| Patients with appropriate hair removal (Surgical Care)                    | 93.5                             | 98.3                             | 99.5                             | 1.2                                     |
| Smoking cessation advice (Heart Failure)                                  | 94.8                             | 97.9                             | 99.2                             | 1.3                                     |
| Discharged on antithrombotic therapy (Stroke)                             | N/A                              | N/A                              | 99.1                             | N/A                                     |
| Aspirin at arrival (Heart Attack)   | 97.5                             | 98.4                             | 98.8                             | 0.4                                     |
| Beta-blocker at discharge (Heart Attack)                                  | 96.2                             | 96.8                             | 97.9                             | 1.1                                     |
| Aspirin at discharge (Heart Attack)                                       | 94.3                             | 96.6                             | 97.7                             | 1.1                                     |
| Appropriate prophylactic antibiotics (Surgical Care)                      | 91.9                             | 96.7                             | 97.1                             | 0.4                                     |
| Smoking cessation advice (Pneumonia)                                      | 88.3                             | 94.1                             | 97.0                             | 2.9                                     |
| Antithrombotic therapy by end of hospital day two (Stroke)                | N/A                              | N/A                              | 96.6                             | N/A                                     |
| LVS assessment (Heart Failure)  | 88.6                             | 93.8                             | 95.7                             | 1.9                                     |
| Antibiotics within one hour before the first surgical cut (Surgical Care) | 76.1                             | 90.8                             | 95.7                             | 4.9                                     |
| Blood cultures in ICU (Pneumonia)   | 84.6                             | 90.8                             | 94.6                             | 3.8                                     |
| ACEI or ARB at discharge (Heart Attack)                                   | 82.1                             | 88.0                             | 93.9                             | 5.9                                     |
| Antibiotic within six hours of arrival (Pneumonia)                        | 83.4                             | 87.8                             | 93.1                             | 5.3                                     |
| Blood cultures in ED (Pneumonia)  | 77.2                             | 86.8                             | 92.7                             | 5.8                                     |
| Antibiotics to non-ICU patients (Pneumonia)                               | 77.2                             | 86.0                             | 89.5                             | 3.5                                     |
| Stopping antibiotics within 24 hours (Surgical Care)                      | 58.0                             | 78.6                             | 89.5                             | 10.9                                    |
| Assessed for rehabilitation (Stroke)                                      | N/A                              | N/A                              | 88.0                             | N/A                                     |
| ACEI or ARB at discharge (Heart Failure)                                  | 72.3                             | 81.1                             | 86.8                             | 5.7                                     |
| Pneumococcal vaccination (Pneumonia)                                      | 57.9                             | 75.1                             | 84.2                             | 9.1                                     |
| Cardiac patients with 6 a.m. postoperative blood glucose (Surgical Care)  | 58.3                             | 74.7                             | 84.0                             | 9.3                                     |

*(Table continues on next page...)*

|   |   |   |   |
|---|---|---|---|
| <span style="color: #008080;">■</span> accountability measure | <span style="color: #808080;">■</span> non-accountability measure | <span style="color: #FF8C00;">■</span> outcomes measure | <span style="color: #00BFFF;">■</span> test measure |
|---|---|---|---|

# National Performance Summary (Cont'd)

**Table 13: Percentage of hospitals achieving 90 percent or greater performance (Cont'd)**

| Performance measure   | 2008 High<br>(percentage<br>>90) | 2009 High<br>(percentage<br>>90) | 2010 High<br>(percentage<br>>90) | 2009-2010<br>difference<br>(percentage) |
|---|----------------------------------|----------------------------------|----------------------------------|---|
| Prescribing VTE medicine/treatment (Surgical Care)                              | 52.4                             | 65.2                             | 83.5                             | 18.3                                    |
| Anticoagulation therapy for atrial fibrillation/flutter (Stroke)                | N/A                              | N/A                              | 83.3                             | N/A                                     |
| Beta-blocker patients who received beta-blocker perioperatively (Surgical Care) | 69.7                             | 67.0                             | 82.0                             | 15.0                                    |
| VTE patients with UFH monitoring (VTE)  | N/A                              | N/A                              | 81.8                             | N/A                                     |
| Admission screening (Inpatient Psychiatric)                                     | N/A                              | 64.2                             | 76.9                             | 12.7                                    |
| Receiving VTE medicine/treatment (Surgical Care)                                | 66.5                             | 75.8                             | 76.1                             | 0.3                                     |
| Discharged on statin medication (Stroke)  | N/A                              | N/A                              | 74.0                             | N/A                                     |
| Influenza vaccination (Pneumonia)   | 43.1                             | 57.3                             | 73.8                             | 16.5                                    |
| Continuing care plan (Inpatient Psychiatric)                                    | N/A                              | 62.7                             | 73.1                             | 10.4                                    |
| PCI therapy within 90 minutes (Heart Attack)                                    | 35.0                             | 53.4                             | 69.5                             | 16.1                                    |
| Discharge instructions (Heart Failure)  | 40.1                             | 52.3                             | 63.8                             | 11.5                                    |
| Urinary catheter removed (Surgical Care)  | N/A                              | N/A                              | 62.8                             | N/A                                     |
| VTE medicine/treatment in ICU (VTE)   | N/A                              | N/A                              | 59.4                             | N/A                                     |
| Multiple antipsychotic medications (Inpatient Psychiatric)**                    | N/A                              | 48.0                             | 53.0                             | 5.0                                     |
| Stroke education (Stroke)   | N/A                              | N/A                              | 48.1                             | N/A                                     |
| Continuing care plan transmitted (Inpatient Psychiatric)                        | N/A                              | 33.7                             | 47.7                             | 14.0                                    |
| VTE prophylaxis (Stroke)  | N/A                              | N/A                              | 45.3                             | N/A                                     |
| VTE medicine/treatment (VTE)  | N/A                              | N/A                              | 32.3                             | N/A                                     |
| VTE patients with overlap therapy (VTE)   | N/A                              | N/A                              | 28.6                             | N/A                                     |
| Home management plan of care (Children's Asthma)                                | N/A                              | 14.9                             | 27.8                             | 12.9                                    |
| Antibiotics to ICU patients (Pneumonia)   | 4.9                              | 11.7                             | 25.9                             | 14.3                                    |
| VTE warfarin discharge instructions (VTE)                                       | N/A                              | N/A                              | 21.1                             | N/A                                     |
| Thrombolytic therapy (Stroke)   | N/A                              | N/A                              | 18.8                             | N/A                                     |
| Justification for multiple antipsychotic medications (Inpatient Psychiatric)    | N/A                              | 1.2                              | 12.2                             | 11.0                                    |

\*\* For this measure, a low rate is desirable, so the percentage represented is the percent of hospitals with percentage of 10 percent or less.

■ accountability measure   ■ non-accountability measure   ■ outcomes measure   ■ test measure

# Understanding the Quality of Care Measures

## Why they were created, what they report and why the results are important

The Joint Commission has been involved in performance measurement for 25 years, viewing it as a critical way to extend the reach and sophistication of the accreditation process. The Joint Commission's 1990 publication, *The Primer on Clinical Indicator Development and Application*, created a readily adaptable template for performance measure development that is still in use today and established The Joint Commission as a leader in this arena.

The Joint Commission continues to be a leader through initiatives such as the creation of a performance measure data network. Today, this network of 43 measurement systems, all under contract to The Joint Commission, is the source of all quality-related data on The Joint Commission's Quality Check® website ([www.qualitycheck.org](http://www.qualitycheck.org)) and provides 96 percent of the data displayed on the Centers for Medicare & Medicaid Services' (CMS) Hospital Compare [website](#).

*Improving America's Hospitals: The Joint Commission's Annual Report on Quality and Safety* presents the overall performance of Joint Commission-accredited hospitals on quality of care measures relating to heart attack, heart failure, pneumonia, surgery, children's asthma, inpatient psychiatric services, VTE (venous thromboembolism) and stroke. These measures were chosen because they provide concrete data about the best kinds of treatments or practices for common conditions for which Americans enter the hospital and seek care.

The results are important because they show that hospitals have improved. The results identify opportunities for further improvement, and support continual measurement and reporting. Quality improvement in hospitals contributes to saved lives, better health and quality of life for many patients, as well as to lower health care costs.

## A special focus on accountability measures

Accountability measures are evidence-based care processes closely linked to positive patient outcomes. These measures are most suitable for use in programs that hold providers accountable for their performance to external oversight entities and to the public. There has been an evolution of such oversight programs – including those for value-based purchasing, accreditation, certification, and public reporting – and they are often used to demonstrate quality and cost-efficient performance, to drive market share, and to determine appropriate reimbursements.

Each accountability measure meets four criteria (see sidebar) that evaluate whether or not evidence-based care processes associated with the measures lead to positive patient outcomes. As new measures are introduced, they are evaluated against the criteria.

### Criteria for accountability measures

**Research:** Strong scientific evidence demonstrates that performing the evidence-based care process improves health outcomes (either directly or by reducing risk of adverse outcomes).

**Proximity:** Performing the care process is closely connected to the patient outcome; there are relatively few clinical processes that occur after the one that is measured and before the improved outcome occurs.

**Accuracy:** The measure accurately assesses whether or not the care process has actually been provided. That is, the measure should be capable of indicating whether the process has been delivered with sufficient effectiveness to make improved outcomes likely.

**No Adverse Effects:** Implementing the measure has little or no chance of inducing unintended adverse consequences.

# Understanding the Quality of Care Measures (Cont'd)

Most of the measures used through 2010 are categorized as accountability measures; there are six non-accountability measures (see Appendix 3). While performance on non-accountability measures reflect good health care practices, they are not as suitable for use in accountability contexts and often are used for internal quality improvement or educational and guidance purposes.

On the tables in the National Performance Summary section, the composite results for all measures include both accountability and non-accountability measures. The non-accountability measures are shaded gray in the tables. These composite results have historically been provided in previous annual reports, allowing them to be tracked from year-to-year. The composite results for only the accountability measures are provided in the Accountability Measures Summary section.

For more information about accountability measures, see the *New England Journal of Medicine* article “[Accountability Measures – Using Measurement to Promote Quality Improvement](#),” for which Mark R. Chassin, M.D., F.A.C.P., M.P.P., M.P.H., president of The Joint Commission, was the lead author.

## How The Joint Commission is bringing accountability measures into practice

In June 2010, The Joint Commission announced its intention to integrate performance expectations on accountability measures into accreditation standards. That vision will become a reality effective January 1, 2012 when Joint Commission accredited hospitals will be required to meet a new performance improvement requirement (Standard PI.02.01.03, Element of Performance 1) that establishes an 85 percent composite compliance target rate for performance on ORYX accountability measures. The new standard and element performance are:

**PI.02.01.03:** The hospital improves its performance on ORYX accountability measures.

**EP 1:** The hospital achieves a composite performance rate of at least 85% on the ORYX accountability measures transmitted to The Joint Commission.

*Note: This standard does not apply to the critical access hospital program.*

Compliance with the element of performance, which has been identified as a direct impact requirement, is based on performance on a single composite measure rate for all reported accountability measures. The target rate is based on research of past ORYX performance data that shows increasing levels of compliance with accountability measures. In 2010, 98 percent of hospitals met an 80 percent compliance rate, 96 percent met an 85 percent rate, and 92 percent met a 90 percent target. An organization that is not in compliance with the target rate at the time of the triennial survey would receive a Requirement for Improvement (RFI) in its accreditation report.

It's important to note that where a patient receives care makes a difference. Not all hospitals deliver the same level of quality; some hospitals perform better than others in treating particular conditions and in achieving patient satisfaction. This variability has been known within the hospital industry for a long time. Quality, safety and patient satisfaction results for specific hospitals can be found at Quality Check™ ([www.qualitycheck.org](http://www.qualitycheck.org)). Designation as an accountability measure is included in the information on Quality Check™.

# Understanding the Quality of Care Measures (Cont'd)

## How quality measures are determined

The Joint Commission worked closely with clinicians, health care providers, hospital associations, performance measurement experts, and health care consumers across the nation to identify the quality measures. This collaborative process identified measures that reflect the best "evidence-based" treatments relating to heart attack, heart failure, pneumonia, surgery, children's asthma, inpatient psychiatric services, VTE and stroke. Current measures are the product of The Joint Commission's Hospital Core Measure Initiative that sought to create sets of standard national measures that would permit comparisons across organizations. Subsequently, The Joint Commission collaborated with other organizations, including the Centers for Medicare & Medicaid Services (CMS) and the National Quality Forum (NQF), to align common measures to ease data collection efforts by hospitals and to allow the same data sets to be used to satisfy multiple data requirements.

These measures also are used for the "Hospital Quality Alliance (HQA): Improving Care through Information" initiative. The HQA is a public-private partnership that was founded in 2002 for the purpose of developing a process for hospitals to voluntarily collect and publicly report their performance data. The HQA was initiated through the leadership of the American Hospital Association, Association of American Medical Colleges, and the Federation of American Hospitals. HQA includes representatives from the Centers for Medicare & Medicaid Services, the Agency for Healthcare Research and Quality, the National Quality Forum, The Joint Commission, the American Medical Association, the American Nurses Association, the National Association of Children's Hospitals and Related Institutions, the National Association of Public Hospitals and Health Systems, the Consumer-Purchaser Disclosure Project, the AFL-CIO, AARP, U.S. Chamber of Commerce, America's Health Insurance Plans, Blue Cross and Blue Shield Association, the National Business Coalition on Health, the Society for Critical Care Medicine, the Wisconsin Collaborative for Healthcare Quality, and the Department of Veterans Affairs.

## Related quality reporting efforts of other organizations

The CMS Hospital Compare website ([www.hospitalcompare.hhs.gov](http://www.hospitalcompare.hhs.gov)) reports quality information from U.S. hospitals, including treatments relating to heart attack, heart failure, pneumonia, surgical care and childhood asthma. Hospitals voluntarily submit these data abstracted from their medical records about the treatments that their patients receive, including patients with Medicare and those who do not have Medicare. Consumers can use Hospital Compare to compare care of local hospitals to state and national averages. The Hospital Compare website was created through the efforts of CMS and the Hospital Quality Alliance (HQA). Unlike Quality Check, Hospital Compare includes data from organizations accredited by CMS-recognized accrediting organizations other than The Joint Commission; some unaccredited organizations; and most Department of Veterans Affairs medical centers. It does not currently include Department of Defense and Indian Health Service hospitals.

## Data collection and reporting requirements

Currently, The Joint Commission requires most hospitals to select four measure sets. Hospitals choose sets best reflecting their patient population and report on all the applicable measures in each of the sets they choose. Hospitals submit monthly data on a quarterly basis on all measures of performance within specific sets they choose to third-party vendors, which compile and provide data to The Joint Commission. Hospitals can obtain feedback reports through The Joint Commission's extranet.

# Understanding the Quality of Care Measures (Cont'd)

## Note on calculations and methodology

This report includes two different calculations of composite rates:

- **Composite for all measures:** The sum of all of the numerator counts, for both accountability and non-accountability process measures across all measure sets, divided by the sum of the denominator counts from across the same accountability and non-accountability measures.
- **Composite for accountability measures:** The sum of all of the numerator counts for accountability process measures across all measure sets divided by the sum of all the denominator counts from across the same accountability measures.

A composite measure is calculated by adding or "rolling up" the number of times recommended care was provided over all the process measures in the given measure set and dividing this sum by the total number of opportunities for providing this recommended care, determined by summing up all of the process measure populations for this same set of measures. The composite measure shows the percentage of the time that recommended care was provided.

For example, if a heart attack patient receives each treatment included in the heart attack measure set, that's a total of seven treatments in seven opportunities. If 60 patients receive all seven treatments, that's 420 treatments in 420 opportunities - 100 percent composite performance. However, if some of the 60 patients don't receive all seven treatments (e.g., the total number of opportunities for treatments is 410), and the treatments given to the 60 patients add to a total of 378, the heart attack composite score is 92 percent.

Composite performance measures are useful in integrating performance measure information in an easily understood format that gives a summary assessment of performance for a given area of care in a single rate. The composite measures in this report are based on combining all of the process rate-based measures in the measure set. For a performance measure, each patient identified as falling in the measure population can be considered an opportunity to provide recommended care.

## Inclusions and exclusions

This report only includes data about patients considered "eligible" for one of the evidence-based treatments or measures. It's important to understand that not every patient gets – or should get – a treatment. Often, patients have health conditions or factors that influence the effectiveness of treatments, or whether or not a provider orders a particular treatment. Also, a patient may choose to refuse treatment or not follow the instructions of his or her care plan.

## Links for More Information

**The Joint Commission:** [www.jointcommission.org](http://www.jointcommission.org)

**Quality Check:** [www.qualitycheck.org](http://www.qualitycheck.org)



# Glossary

**Accountability measure.** An accountability measure is a quality measure that meets four criteria designed to identify measures that produce the greatest positive impact on patient outcomes when hospitals demonstrate improvement. The four criteria are: research, proximity, accuracy and adverse effects (see page 29 for an explanation of the criteria).

**ACEI (ACE inhibitors).** ACE stands for "angiotensin converting enzyme." ACE inhibitors are medicines that are used to treat heart failure, high blood pressure, and patients with left ventricular systolic dysfunction following a heart attack. These medicines block an enzyme in the body that is responsible for causing the blood vessels to narrow. If the blood vessels are relaxed, blood pressure is lowered and more oxygen-rich blood can reach the heart. ACE inhibitors also lower the amount of salt and water in the body, which helps to lower blood pressure.

**Admission screening.** Evaluating a patient for violence risk, substance use, psychological trauma history and patient strengths within the first three days of admission to an inpatient psychiatric facility.

**Antibiotic timing.** The length of time from arrival at the hospital until antibiotics are given. Antibiotics are generally given as soon as possible to pneumonia patients to speed their recovery.

**Antithrombotic therapy.** Pharmacologic agents (oral or parenteral) that prevent or interfere with the formation of a blood clot.

**ARB.** ARB stands for "angiotensin receptor blocker." An ARB is a medicine taken by mouth that reduces blood pressure and strengthens the heart beat. ARBs are useful in the treatment of cardiac diseases such as heart attack and heart failure.

**Beta-blocker.** This type of medicine blocks the action of certain hormones on the heart. By blocking these hormones, beta-blockers help to reduce the heart rate and blood pressure, thereby reducing the amount of oxygen needed by the heart.

**Blood cultures.** Blood tests that look for bacteria in the blood. These tests are given to pneumonia patients before antibiotics are administered.

**CABG.** CABG stands for coronary artery bypass graft surgery – an operation in which a section of vein or artery is used to bypass a blockage in a coronary artery, allowing enough blood to flow to deliver oxygen and nutrients to the heart muscles. CABG is performed to prevent damage from a myocardial infarction (heart attack) or to relieve angina.

**Composite measure.** A measure that combines the results of two or more process measures into a single rating. A composite is a summary of a related set of measures, which could be a condition specific set, all accountability measures, or accountability and non-accountability measures. However, accountability composites are restricted to accountability measures; non-accountability measures are excluded.

**Fibrinolytic therapy.** Medication that dissolves blood clots. Breaking up blood clots increases blood flow to the heart. If blood flow is returned to the heart muscle quickly during a heart attack, the risk of death is decreased.

**Hair removal, appropriate.** Removing hair with clippers or depilatory is considered appropriate. Shaving is considered inappropriate.

## Glossary (Cont'd)

**Heart failure.** A condition in which the heart loses its ability to efficiently pump blood throughout the body.

**Inpatient psychiatric services.** Inpatient psychiatric services include care provided to a patient for a mental disorder while hospitalized in a psychiatric unit of an acute care hospital or a free-standing psychiatric hospital. Services rendered to outpatients or “day treatment” patients are not considered inpatient psychiatric services.

**LVS assessment.** An in-depth evaluation of heart muscle function that helps determine the correct treatment for heart failure. LVS stands for “left ventricular systolic.” An LVS assessment evaluates how well the left ventricle—the heart’s main pumping chamber—is functioning. Left ventricular diastolic dysfunction results when the heart chamber is not pumping all the blood out before it refills for the next heart beat. This results in high pressure within the heart and can produce heart failure.

**Multiple antipsychotic medications.** Antipsychotic medications are drugs prescribed to treat mental disorders; if two or more medications are routinely administered or prescribed, it is considered multiple medications.

**Non-accountability measure.** A non-accountability measure differs from an accountability measure in that it is more suitable for secondary uses, such as exploration or learning within individual health care organizations, and is good advice in terms of appropriate patient care.

**Outcomes measure.** A measure that indicates the result of performance or non-performance of one or more functions or processes.

**Overlap therapy.** Administration of parenteral (intravenous or subcutaneous) anticoagulation therapy and warfarin to treat patients with VTE.

**PCI therapy.** PCI stands for “percutaneous coronary interventions.” PCI therapy is a coronary angioplasty procedure performed by a doctor who threads a small device into a clogged artery to open it, thereby improving blood flow to the heart. A lack of blood supply to the heart muscle can cause lasting heart damage. PCI therapy is used as an alternative treatment to coronary artery bypass surgery (CABG).

**Percentage points.** This is the difference on a percentage scale between two rates. For example, the difference between 2002 performance and 2007 performance rates.

**Perioperative.** This generally refers to 24 hours before surgery and lasts until the patient leaves the recovery area.

**Physical restraint.** A physical restraint is any manual or physical or mechanical device, material, or equipment that immobilizes a patient or reduces the ability of a patient to move his or her arms, legs, body or head freely. A physical restraint is used as a restriction to manage a patient’s behavior or restrict the patient’s freedom of movement and is not a standard treatment for the patient’s medical or psychiatric condition.

## Glossary (Cont'd)

**Pneumonia.** An acute infection of lung tissue that is associated with at least some symptoms of acute infection, such as altered or abnormal breathing sounds.

**Pneumococcal vaccination.** A vaccination that helps to prevent pneumonia.

**Post discharge continuing care plan.** Communication from the hospital to the next health provider after a patient is discharged from the hospital. The plan must contain the reason for hospitalization, main diagnosis at discharge, a list of medications at discharge, and recommendations for the next level of care.

**Process measure.** A measure used to assess a goal directed, interrelated series of actions, events, mechanisms or steps, such as measure of performance that describes what is done to, for or by patients, as in performance of a procedure.

**Prophylaxis.** Any medical intervention designed to preserve health and prevent disease.

**Rehabilitation assessment.** Evaluation of the need for or receipt of rehabilitation services. Rehabilitation is a treatment or treatments designed to facilitate the process of recovery from injury, illness or disease to as normal a condition as possible.

**Reliever, for asthma.** A medicine that reduces narrowing in the lung's airways, providing quick relief from asthma symptoms.

**Seclusion.** Seclusion is the involuntary confinement of a patient alone in a room or an area where the patient is physically prevented from leaving.

**Statin.** A class of pharmaceutical agents that lower blood cholesterol. Specifically, the agents modify LDL-cholesterol by blocking the action of an enzyme in the liver which is needed to synthesize cholesterol, thereby decreasing the level of cholesterol in the blood. Statins are also called HMG-CoA reductase inhibitors.

**Systemic corticosteroid, for asthma.** A medication that helps control asthma symptoms by controlling swelling, inflammation, and the buildup of mucous in the lung's airways.

**Thrombolytic therapy.** Administration of a pharmacological agent intended to cause lysis of a thrombus (destruction or dissolution of a blood clot).

**UFH monitoring.** Using a protocol or nomogram to ensure that UFH (unfractionated heparin) achieves a sufficient level of anti-coagulation.

**VTE.** VTE stands for venous thromboembolism and is when a blood clot forms in a deep vein in the body, such as in the leg. VTE is a common complication at surgery and hospitalized medical patients, particularly those who have decreased mobility, are at risk for development of VTE.

# Appendix

## Appendix 1: Short and original measure names

Note: This is not a complete list of measures; for some measures, the original name is a short name.

| Short measure name  | Original measure name   |
|---|---|
| <b>Heart attack care</b>                                  |   |
| Aspirin at discharge                                      | Aspirin prescribed at discharge   |
| ACEI or ARB at discharge                                  | ACEI or ARB for LVSD  |
| Smoking cessation advice                                  | Adult smoking cessation advice/counseling   |
| Beta-blocker at discharge                                 | Beta-blocker prescribed at discharge  |
| Fibrinolytic therapy within 30 minutes                    | Fibrinolytic therapy received within 30 minutes of hospital arrival   |
| PCI therapy within 90 minutes                             | Primary PCI received within 90 minutes of hospital arrival (timing of receipt of primary PCI)   |
| <b>Heart failure care</b>                                 |   |
| LVS assessment  | Evaluation of LVS function  |
| Smoking cessation advice                                  | Adult smoking cessation advice/counseling   |
| ACEI or ARB at discharge                                  | ACEI or ARB for LVSD  |
| <b>Pneumonia care</b>                                     |   |
| Blood cultures in ICU                                     | Blood cultures performed within 24 hours prior to or 24 hours after hospital arrival for patients who were transferred or admitted to the ICU within 24 hours of hospital arrival |
| Blood cultures in ED                                      | Blood cultures performed in the emergency department prior to initial antibiotic received in hospital   |
| Antibiotic within six hours of arrival                    | Initial antibiotic received within six hours of hospital arrival (timing of receipt of initial antibiotic following hospital arrival)   |
| Smoking cessation advice                                  | Adult smoking cessation advice/counseling   |
| Antibiotics to immunocompetent patients                   | Initial antibiotic selection for CAP in immunocompetent patient   |
| Antibiotics to ICU patients                               | Initial antibiotic selection for CAP in immunocompetent – ICU patient   |
| Antibiotics to non-ICU patients                           | Initial antibiotic selection for CAP in immunocompetent – non-ICU patient   |
| <b>Surgical care</b>                                      |   |
| Antibiotics within one hour before the first surgical cut | Prophylactic antibiotic received within one hour prior to surgical incision – overall rate  |
| Appropriate prophylactic antibiotics                      | Prophylactic antibiotic selection for surgical patients – overall rate  |
| Stopping antibiotics within 24 hours                      | Prophylactic antibiotics discontinued within 24 hours after surgery end time – overall rate   |

■ accountability measure  
 ■ non-accountability measure  
 ■ outcomes measure  
 ■ test measure

# Appendix

## Appendix 1 (Cont'd)

| Short measure name  | Original measure name   |
|---|---|
| <b>Surgical care (Cont'd)</b>                                   |   |
| Cardiac patients with 9 a.m. postoperative blood glucose        | Cardiac surgery patients with controlled 9 a.m. postoperative blood glucose   |
| Patients with appropriate hair removal                          | Surgery patients with appropriate hair removal  |
| Beta-blocker patients who received beta-blocker perioperatively | Surgery patients on beta-blocker therapy prior to arrival who received a beta-blocker during the perioperative period                   |
| Prescribing VTE medicine/treatment                              | Surgery patients with recommended venous thromboembolism prophylaxis ordered  |
| Receiving VTE medicine/treatment                                | Surgery patients who received appropriate venous thromboembolism prophylaxis within 24 hours prior to surgery to 24 hours after surgery |
| Urinary catheter removed  | Urinary catheter removed on postoperative day 1 (POD 1) or postoperative day 2 (POD 2) with day of surgery being day zero               |
| <b>Children's asthma care</b>                                   |   |
| Home management plan of care                                    | Home management plan of care (HMPC) document given to patient/caregiver   |
| <b>Inpatient psychiatric services</b>                           |   |
| Multiple antipsychotic medications                              | Multiple antipsychotic medications at discharge – overall rate  |
| Justification for multiple antipsychotic medications            | Multiple antipsychotic medications at discharge with appropriate justification – overall rate   |
| Continuing care plan created                                    | Post discharge continuing care plan – overall rate  |
| Continuing care plan transmitted                                | Post discharge continuing care plan transmitted – overall rate  |
| <b>VTE care</b>   |   |
| VTE patients with overlap therapy                               | VTE patients with anticoagulation overlap therapy   |
| VTE patients with UFH monitoring                                | VTE patients receiving unfractionated heparin (UFH) with dosages/platelet count monitoring by protocol                                  |
| <b>Stroke care</b>  |   |
| VTE prophylaxis   | Stroke patients with venous thromboembolism (VTE) prophylaxis   |

■ accountability measure  
 ■ non-accountability measure  
 ■ outcomes measure  
 ■ test measure

# Appendix

## Appendix 2: 2010 accountability measures

### Heart attack care

- Aspirin at arrival
- Aspirin at discharge
- ACEI or ARB at discharge
- Beta-blocker at discharge
- Fibrinolytic therapy within 30 minutes
- PCI therapy within 30 minutes

### Heart failure care

- ACEI or ARB at discharge

### Pneumonia care

- Pneumococcal vaccination
- Blood culture in ED
- Antibiotics to immunocompetent patients\*
- Influenza vaccination

\* This measure (which is aligned with The Centers for Medicare & Medicaid Services measure) is separated into two measures (antibiotics to ICU patients and antibiotics to non-ICU patients) for reporting to The Joint Commission.

### Surgical care

- Antibiotics within one hour before the first surgical cut
- Appropriate prophylactic antibiotics
- Stopping antibiotics within 24 hours
- Cardiac patients with 6 a.m. postoperative blood glucose
- Patients with appropriate hair removal
- Beta-blocker patients who received beta-blocker perioperatively
- Prescribing VTE medicine/treatment
- Receiving VTE medicine/treatment

### Children's asthma care

- Relievers for inpatient asthma
- Systemic corticosteroids for inpatient asthma
- Home management plan of care

## Appendix 3: 2010-2011 non-accountability measures

### Heart attack care

Smoking cessation advice\*

### Heart failure care

Discharge instructions

LVS assessment

Smoking cessation advice\*

### Pneumonia care

Antibiotics within six hours of arrival\*

Smoking cessation advice\*

\* This measure will be retired effective with December 31, 2011 discharges

# Appendix

## **Appendix 4: 2011 additional accountability measures**

### **Heart attack care**

Statin prescribed at discharge

### **Pneumonia care**

Blood cultures in ICU

### **Surgical care**

Urinary catheter removed

### **Inpatient psychiatric services**

Hours of physical restraint use\*

Hours of seclusion\*

Multiple antipsychotic medications

Justification for multiple antipsychotic medications

Continuing care plan created

Continuing care plan transmitted

\*These process measures are reported as a ratio and will not be included in The Joint Commission's calculation of composite rates.

### **VTE (venous thromboembolism) care**

VTE prophylaxis

ICU VTE prophylaxis

VTE patients with anticoagulation overlap therapy

VTE patients with UFH monitoring

VTE warfarin therapy discharge instructions

### **Stroke care**

Stroke patients with VTE prophylaxis

Discharged on antithrombotic therapy

Anticoagulation therapy for atrial fibrillation/flutter

Thrombolytic therapy

Antithrombotic therapy by end of hospital day two

Discharged on statin medication

Stroke education (discharge instructions)

Assessed for rehabilitation