Improving America’s Hospitals

The Joint Commission’s Annual Report on Quality and Safety

2007
The Joint Commission’s mission is to continuously improve the safety and quality of care provided to the public through the provision of health care accreditation and related services that support performance improvement in health care organizations. More than 90 percent of the hospitals in the United States use Joint Commission standards to assure the delivery of safe, quality care. A Joint Commission-accredited organization proudly displays its Joint Commission Gold Seal of Approval™ and strives continuously to provide the quality health care exemplified by the seal.
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INTRODUCTION

INTRODUCTION FROM THE JOINT COMMISSION PRESIDENT

This second annual report on quality and safety comes in response to the overwhelmingly positive feedback The Joint Commission received after compiling and publishing its maiden report in March 2007. The report’s website—www.jointcommissionreport.org—has received well over one million hits since March of this year, averaging about 8,000 per day and the report has been especially well received in the health care community where the growing commitment to quality and safety improvement is today quite evident.

In addition to offering national and statewide perspectives on hospital performance, the report encourages the health care professional community—as well as the media and consumers—to examine the performance of local hospitals and other providers at the Joint Commission’s Quality Check® website—www.qualitycheck.org. This comparison of local providers to national and state averages is still another way in which the Commission supports health care organization accountability and continual improvement.

Improving America’s Hospitals: The Joint Commission’s Annual Report on Quality and Safety 2007 presents reliable information on how America’s accredited hospitals performed against evidence-based quality measures relating to the care of heart attack, heart failure, pneumonia and surgical patients during the 2006 year. Previous years’ results are available as well; the results show continuing annual improvements in most cases. These improvements have saved multiple lives and resulted in better health and quality of life for thousands of patients.

Most of the measures of heart attack, heart failure and pneumonia care included in this report have now been tracked for five years, while the surgical care measures have now been tracked for two years. This report also includes performance results regarding compliance with the 2006 National Patient Safety Goals (NPSGs), portrays 2003-2006 NPSG performance trends, identifies the top standards compliance issues in 2006, and presents information about sentinel events. Sentinel events are preventable adverse events that result in serious injury or death. The report also includes a section that describes how to compare local hospital performance to national and state performance benchmarks at the Joint Commission’s Quality Check website.

The Institute of Medicine has urged that quality-related performance be gathered and made public. The Joint Commission and others have responded by producing reports such as this report. Today, we continue to work with accredited health care organizations, stakeholder groups, and others to produce an increasingly rich array of performance data and information and to produce these products in meaningful time frames.
The quality and safety performance results in this report show both where improvements have been made and where future opportunities for improvement still lie. While consumers may obtain performance data or health care quality and safety ratings of health care providers from many sources, this report is based on reliable data that are scientifically sound. Much of the improvement reflected in this report can be attributed to the consistent application of focused, evidence-based measures which constitute the foundation of the Joint Commission's performance measurement endeavors.

The Joint Commission is committed to identifying new and better ways to collect and portray credible clinical performance data. Our ultimate goal—as ever—is to create accountability among care providers and improve health care outcomes for patients.

Sincerely,

Dennis S. O’Leary, M.D.
President
The Joint Commission
Improving America's Hospitals

The Joint Commission's Annual Report on Quality and Safety

2007

Executive Summary
EXECUTIVE SUMMARY

Improving America’s Hospitals: The Joint Commission’s Annual Report on Quality and Safety 2007 presents how America’s accredited hospitals performed against quality performance measures and safety goals during 2006 and in previous years.

Key Findings

1. Accredited U.S. hospitals continue to show measurable improvements in health care quality and patient safety.

2. Requiring hospitals to follow a standard process for continual quality measurement, reporting and improvement has contributed significantly to this improvement.

3. Much room for improvement remains.

4. Significant variability exists in the performance of hospitals by state, as well as between the highest- and lowest-performing hospitals.

5. The Joint Commission continues to make performance measurement and reporting requirements more comprehensive and increasingly relevant toward improving accountability and health outcomes.

1. Accredited U.S. hospitals continue to show measurable improvement in quality and safety. The quality of care provided for heart attack, heart failure, pneumonia and surgical care patients continues to improve, according to 2006 performance data provided by hospitals accredited by The Joint Commission. Hospitals also achieved 90 percent or higher compliance on most of the 2006 Joint Commission National Patient Safety Goal (NPSG) requirements.

• The Joint Commission measures quality improvement by tracking hospital performance in providing common treatments shown by scientific evidence to lead to the best outcomes for patients. The data demonstrate that patients are more consistently receiving these “evidence-based” treatments. Quality performance results consistently improved from year to year, with few exceptions, on 13 individual measures of performance quality analyzed from 2002 through 2006 and on six measures examined from 2005 through 2006. More than 3,000 hospitals contributed data. Six of the 13 measures analyzed from 2002-2006 apply to heart attack care, four to heart failure care and three to pneumonia care. Of the six new measures tracked during 2005-2006, one relates to heart attack care, three to pneumonia care and two to surgical care. For more on hospital quality performance, go to the Quality and Safety Key Performance Results section.

• Each year, hospitals must meet the requirements of the Joint Commission’s National Patient Safety Goals (NPSGs) as part of the accreditation process. In 2006, seven goals and 16 requirements were applicable to hospitals. On 10 of the requirements, 90 percent or more of the 1,429 hospitals demonstrated compliance. This report also shows 2003-2006 NPSG compliance data. Data regarding compliance with NPSGs should be interpreted with caution; compliance often requires significant behavioral and/or systemic change, and lower
rates can relate to a variety of factors. For more on NPSG compliance, go to the Quality and Safety Key Performance Results section.

- Even small percentage improvements in performance are statistically significant. Many of the smaller percentage improvements occurred within large patient populations, meaning that significantly more patients received the benefits of an evidence-based treatment or safety precaution. Also, in some cases, performance was already quite high and there was little room for improvement.

- Quality and safety improvement in hospitals contributes to saved lives and better health and quality of life for many patients, as well as to lower health care costs. On the other hand, when hospitals do not consistently provide standard evidence-based treatments, the risk of adverse outcomes for patients increased. This enhanced risk may result in new or prolonged illnesses, unnecessary hospitalization, increased costs, increased time away from work, reduced life quality, or even death.

2. Requiring hospitals to follow a standard process for continual quality measurement, reporting and improvement has contributed significantly to this improvement. Implemented several years ago, this process requires hospitals to report quality-related performance. In turn, performance results are publicly reported through this report, the Quality Check website (www.qualitycheck.org) and other means.

- The results show that the process had a positive impact on specific aspects of health care quality and support the continued use of performance measurement as a means for encouraging improvement in hospitals. For more on the value of performance measurement and on how quality measures are determined, go to the Background Information section.

3. Much room for improvement remains. While the data presented in this report show good progress, they also demonstrate that much room for improvement on most measures remains.

- 90 percent of American hospitals achieved 90 percent compliance on only four of 22 quality-related measures tracked during 2006. The percentage of hospitals with favorable performance ranges from 99.6 percent to 0.7 percent on 22 measures of heart attack, heart failure, pneumonia care and surgical care. The best performance was in providing an oxygenation assessment for patients with pneumonia, with 99.6 percentage of hospitals achieving annual overall performance over 90 percent. The other three measures that showed achievement by hospitals of more than 90 percent related to heart attack care. Performance on the other 18 measures ranged from 88.7 percent down to 0.7 percent.

- While most of the performance levels on the lower end of the scale involved measures first reported in 2005 or 2006, treatments are still not being performed consistently for some measures introduced in 2002. For example:
  - Discharge instructions for heart failure patients—17.7 percent not being performed consistently
  - Pneumococcal screening for pneumonia patients—22.7 percent not being performed consistently
  - ACE inhibitor prescribed at discharge for heart failure patients—36.1 percent not being performed consistently
  - ACE inhibitor prescribed at discharge for heart attack patients—43.6 percent not being performed consistently
The Joint Commission is working to address these and other issues in a number of ways, including standards development, promulgation of National Patient Safety Goals, and collaborative efforts with other organizations interested in furthering health care quality and patient safety improvement. For more data showing room for improvement, go to the Quality and Safety Key Performance Results section.

4. **Significant variability exists in the performance of hospitals by state, as well as between the highest- and lowest-performing hospitals.** This variability has been known within the hospital industry for a long time.

   - Statewide performance of hospitals, for example, on the measure of providing discharge instructions to patients with heart failure ranges from 49.4 percent to 91 percent. On the measure of providing pneumococcal screening and vaccination, performance ranges from 55.5 percent to 91 percent. State variability is as high as 80 percent on specific measures of surgical care. There are exceptions to this variability; state performance ranges from 98.9 percent to 100 percent on measuring oxygen in the bloodstream of patients with pneumonia. For more statewide results, go to the Quality and Safety Key Performance Results section.

   - There are significant differences between the highest- and lowest-performing hospitals. The data show that some hospitals perform better than others in treating particular conditions. Detailed results for specific hospitals can be found at www.qualitycheck.org. Health care consumers can assure the best care for themselves and their families by comparing hospital quality and safety, asking their doctors questions, considering options, and making informed decisions. For more on how to evaluate local hospital performance, go to the Quality and Safety Key Performance Results section.

5. **The Joint Commission continues to make performance measurement and reporting requirements more comprehensive and increasingly relevant to improve accountability and health outcomes.** In 2008, The Joint Commission plans to add measures to the pneumonia and surgical care measure sets. It is anticipated that new measure sets respecting hospital outpatient care and hospital-based inpatient psychiatric care will also be added. In addition, The Joint Commission will begin to report information on the CAHPS Hospital Survey, also known as Hospital CAHPS or H-CAHPS, which stands for Consumer Assessment of Healthcare Providers and Systems. H-CAHPS is a standardized survey instrument and data collection methodology for measuring adult patient perspectives of hospital care and services. Hospitals across the country use this survey and voluntarily report data to the Centers for Medicare & Medicaid Services.

   Over the next few years, the Joint Commission plans to continue its collaborative efforts with the Centers for Medicare and Medicaid Services (CMS), the National Quality Forum (NQF), the Hospital Quality Alliance (HQA) and other organizations to assure efficiency, consistency and scientific credibility in data collection. In turn, the public reporting of increasingly robust data will become even more relevant to quality improvement, benchmarking, accountability, decision-making, accreditation and research. Collaboration should lead to industry-wide agreement on priorities and on new and improved methods for optimizing health care quality and patient safety.
OTHER METHODS OF MEASURING QUALITY AND SAFETY

In addition to the evidence-based quality measures and the National Patient Safety Goals described earlier in this summary, The Joint Commission tracks quality and safety improvement by other methods, as well. Each year, for example, through its accreditation program, The Joint Commission identifies top standards compliance issues – quality standards that were the most difficult for hospitals to meet. The Joint Commission also monitors the number and root causes of sentinel events. For more on top compliance issues and sentinel events, go to the Quality and Safety Key Performance Results section.

FOR MORE DETAILED INFORMATION

This report features detailed information on all performance results, as well as additional background on how the performance measures were determined. To find specific information, please refer to the Table of Contents.
BACKGROUND INFORMATION

In this section of the report, you will find essential information about the importance of performance measurement and how it supports quality and safety. You will see an explanation of how the quality measures were created, as well as background on the medical conditions included in the report. The Joint Commission’s deep commitment and involvement in safety improvement also is outlined.

JOINT COMMISSION ACCREDITATION
How Performance Measurement Supports Quality Improvement and Patient Safety

“The mission of The Joint Commission is to continuously improve the safety and quality of care provided to the public through the provision of health care accreditation and related services that support performance improvement in health care organizations.”

The fundamental goal of Joint Commission accreditation is performance improvement. Four major sets of activities support Joint Commission accreditation services: information dissemination, public policy initiatives and the two others given special focus in this report—performance measurement and patient safety.

The Joint Commission has been involved in performance measurement since 1986, 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*—its all-time best-selling technical book—created a readily-adaptable template for performance measure development that is still in wide use today and established The Joint Commission as a leader in this arena.

The Joint Commission continues this leadership through initiatives such as the creation of a performance measure data network. Today, this network of 51 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) and provides 93 percent of the data displayed on the Centers for Medicare and Medicaid Services’ (CMS) Hospital Compare website.

In the early 2000s, The Joint Commission established National Patient Safety Goals (NPSGs) and related requirements. NPSGs were soon accompanied by additional standards encouraging organizations to establish internal patient safety programs, to undertake proactive risk analyses, and to be transparent in sharing information about adverse events with patients and their families. Today, well over 50 percent of The Joint Commission’s standards relate directly to patient safety.

The Joint Commission continues to issue “lessons learned” advisory *Sentinel Event Alerts* in response to serious adverse events and updates all adverse event and root cause data in its Sentinel Event database. The Sentinel Event Policy encouraging the reporting and requiring the root cause analysis of sentinel events began in response to a series of serious adverse events in hospitals that captured national public attention in 1995.
In 2005, the World Health Organization (WHO) designated The Joint Commission and Joint Commission International as a Collaborating Centre for Patient Safety Solutions as part of the broader World Alliance for Patient Safety.

To improve health care quality and safety, The Joint Commission continues to disseminate pertinent and necessary information and to serve as an advocate for improved public policies.

UNDERSTANDING THE QUALITY OF CARE MEASURES
Why they were created, what they report and why the results are important

Improving America's Hospitals: The Joint Commission's Annual Report on Quality and Safety presents the overall performance of America's accredited hospitals on quality of care measures relating to the care provided to heart attack, heart failure, pneumonia and surgery patients. All of the measures described in this report 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. Hospitals that performed well are those that consistently provide “evidence-based” treatments—practices demonstrated by scientific evidence to lead to the best outcomes.

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.

WHY THESE MEASURES?
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 for heart attack, heart failure, pneumonia, and surgical care patients. These measures are the product of The Joint Commission's Hospital Core Measure Initiative that sought to create a set of standard national measures that would permit comparisons across organizations. Subsequently, The Joint Commission collaborated with other organizations, including the Centers for Medicare and Medicaid Services (CMS) and the National Quality Forum (NQF), to align these measures with other measurement efforts to ease data collection efforts by hospitals and to ensure that the measure data were gathered and calculated in a consistent way in all organizations. These measures also are used for the "Hospital Quality Alliance (HQA): Improving Care through Information" initiative, a voluntary public reporting initiative led by the American Hospital Association, the Federation of American Hospitals and the Association of American Medical Colleges.

Data Collection Methods. The Joint Commission requires most hospitals to select three 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 all measures of performance within specific sets they choose to third-party vendors, which compile and provide data to The Joint Commission each quarter. Hospitals can obtain feedback reports through The Joint Commission’s extranet.
Note on Calculations and Methodology. For each of the three measure sets tracked continuously from 2002 to 2006 (heart attack care, heart failure care, and pneumonia care), a composite measure was created. 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, and the treatments given to the 60 patients add to a total of 378, the composite score is 90 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 three 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. “What one should know about the data” information is included in the Performance Detail section of this report for each measure. This information describes the kinds of patients whose results are excluded from this report’s data. It’s important to understand that not every patient gets—or should get—a treatment. Often, patients have health care 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.

Related Quality Reporting Efforts of Other Organizations. The CMS Hospital Compare website (www.hospital.compare.hhs.gov) reports quality information from U.S. hospitals on treatments for heart attack, heart failure, pneumonia and surgical care. Hospitals agree to submit this quality information for Hospital Compare to make public. Hospitals voluntarily submit these data from their medical records about the treatments their adult patients receive for these conditions, 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), a public-private collaboration established to promote reporting on hospital quality of care.

Ninety-two percent of the data on Hospital Compare is common to The Joint Commission’s Quality Check website, coming from performance measurement vendors contracted by The Joint Commission. Unlike Quality Check, Hospital Compare includes data from some unaccredited organizations but does not include Veterans Administration and Department of Defense hospitals.
MEDICAL CONDITIONS RELATING TO PERFORMANCE MEASURES

This report includes performance results relating to the quality of care provided to heart attack, heart failure, pneumonia and surgical patients. The next several pages provide background information on these four conditions.

Heart Attack

What is a heart attack?

- A heart attack occurs when the supply of blood and oxygen to an area of heart muscle is blocked. This blockage can lead to an irregular heartbeat that causes a severe decrease in the heart’s pumping function and may bring about sudden death. If the blockage is not treated within a few hours, the affected heart muscle will die and be replaced by scar tissue. ¹, ³⁵, ³⁶

- The signs and symptoms of a heart attack include chest and/or upper body discomfort, shortness of breath, cold sweat, nausea or vomiting, and light-headedness or dizziness. Chest discomfort can last for more than a few minutes, or it may go away and come back, and can feel like pressure, squeezing, fullness, or pain. Discomfort in other areas of the upper body can include pain or numbness in one or both arms or in the back, neck, jaw, or stomach. ¹, ³⁵, ³⁶

- Some people may have no symptoms with their heart attack; this is called a “silent” heart attack. ¹, ³⁵, ³⁶

What’s important to know about heart attack

- Every year, more than 1 million Americans have heart attacks. About half die from the heart attack, and about half of those who die do so within one hour of the start of symptoms and before reaching the hospital. ¹, ³⁵, ³⁶

- Most people do not seek medical care for two hours or more after symptoms begin. Many people wait 12 hours or longer to seek treatment. Prompt treatment of a heart attack can help prevent or limit lasting damage to the heart and can prevent sudden death. ¹, ³⁵, ³⁶

For more information about heart attack

- American Heart Association: www.americanheart.org

- American College of Cardiology: www.acc.org

- National Heart, Lung, and Blood Institute: www.nhlbi.nih.gov
Heart Failure

What is heart failure?

- Heart failure occurs when the heart loses its ability to pump enough blood through the body. Usually, the loss in pumping action is a symptom of an underlying heart problem, such as coronary artery disease. 12, 37

- Heart failure usually develops slowly, often over years, as the heart gradually loses its pumping ability and works less efficiently. 12, 37

- There are two types of heart failure—systolic and diastolic:
  
  – Systolic heart failure happens when the heart cannot pump with enough force to push blood into circulation. Blood coming into the heart from the lungs may back up and cause fluid to leak into the lungs, a condition known as pulmonary congestion.

  – Diastolic heart failure happens when the heart cannot properly fill with blood because the muscle has become stiff, losing its ability to relax. This may lead to fluid accumulation, especially in the feet, ankles, and legs. Some patients may have lung congestion. 12, 37

- Symptoms of heart failure include shortness of breath; fatigue or easy tiring; fluid accumulation in the feet, ankles, legs and, occasionally, the abdomen; and persistent coughing. 12, 37

What's important to know about heart failure

- About one in every 100 people over the age of 65 has chronic heart failure. 11, 37

- Heart failure affects 2 to 3 million Americans, and 400,000 new cases are diagnosed each year. 12, 37

- Heart failure causes 39,000 deaths each year and is a contributing factor in another 225,000 deaths. 12, 37

- From 1999 to 2002, almost 5 million Americans were diagnosed with heart failure, and deaths from heart failure increased 35.3 percent. 11, 37

- In 2005, the estimated cost of heart failure in the United States was $27.9 billion. 11, 37

- One study showed that during the past 20 years, heart failure has not declined, but survival after being diagnosed has increased. 11, 37

- Between 1970 and 2000, the death rate for heart failure patients more than doubled, from about 9 percent in 1970 to more than 19 percent in 2000. 13, 37
For more information about heart failure

• American Heart Association: www.americanheart.org
• American College of Cardiology: www.acc.org
• National Heart, Lung, and Blood Institute: www.nhlbi.nih.gov

Pneumonia Care

What is pneumonia?

• Pneumonia is mainly caused by viruses, bacteria or a combination of both. Pneumonia can also be caused by inhaling food, liquid, gases, or dust, and by fungi. Certain diseases, such as tuberculosis, can also cause pneumonia. 20

• Half of all pneumonia cases are caused by viruses. Most viral pneumonia occurs in the very young. The symptoms of viral pneumonia are similar to influenza—fever, dry cough, headache, muscle pain, weakness, and breathlessness. 20

What’s important to know about pneumonia

• Approximately 5 million cases of pneumonia occur annually. 20

• Pneumonia is the cause of nearly 55 million days of restricted activity, 31.5 million bed days, and 1.3 million hospitalizations each year. 21

• Inpatient treatment for pneumonia amounts to more than $7.5 billion annually. 22

For more information about pneumonia

• American Lung Association: www.lungusa.org

• National Institute of Allergy and Infectious Diseases: www3.niaid.nih.gov
Surgical Care*

What is an infection and what is a surgical site infection?

- An infection is a condition where a harmful organism—either a parasite, a virus, or bacteria—involves the human body or its tissues and causes disease.

- A surgical site infection is a condition where a harmful organism invades the human body or its tissues through the opening on the skin at the site of surgery.

What’s important to know about surgical infection

- Surgical site infections are not contagious and cannot be transferred from one person to another. However, these infections can have devastating effects on the patient and their families.

- Surgical site infections are the second most common hospital-acquired infections in the United States. 33

- Of 40 million operations performed in the United States annually, 0.8 million to 2 million are associated with surgical site infections. 34

- Surgical site infections prolong hospital stays by an average of 7.5 days. 34

- Surgical site infections cost the nation between $130 million to $845 million each year. 34

- It is estimated that 40 percent to 60 percent of surgical site infections could be prevented. 34

- In about 25 percent to 50 percent of operations, overuse, underuse, improper timing, and inappropriate use of antibiotics occur. 34

For more information about surgical care

- Surgical Care Improvement Project: www.medqic.org/scip
- Centers for Disease Control and Prevention: www.cdc.gov
- Association for Professionals in Infection Control and Epidemiology: www.apic.org
- Association of periOperative Registered Nurses: www.aorn.org
- Consumer Reports: www.consumersunion.org/campaigns/stophospitalinfections/learn.html

*In 2006, the Surgical Infection Prevention Project was renamed the Surgical Care Improvement Project to encompass more areas of surgical care.
THE JOINT COMMISSION’S COMMITMENT TO SAFETY

The Joint Commission's commitment to patient safety is inherent in its mission. At its heart, accreditation is a risk-reduction activity and compliance with the standards is intended to reduce the risk of bad outcomes. The Joint Commission demonstrates its commitment to patient safety through other numerous efforts, including its Sentinel Event database, its Sentinel Event Alert patient safety newsletter, and the establishment of annual Joint Commission National Patient Safety Goals.

- Central to this work is the Sentinel Event Advisory Group, which was formed in February 2002. Each year, the Advisory Group works with Joint Commission staff and organizations representing key stakeholders to recommend National Patient Safety Goals to The Joint Commission Board of Commissioners for approval; the first goals became effective in January 2003. The goals help accredited organizations address specific areas of concern in regards to patient safety.

The Joint Commission participates in several coalitions organized to improve patient safety.

- As a member of the World Health Organization (WHO) World Alliance for Patient Safety, The Joint Commission has a leading role in the six major Alliance initiatives, including developing an International Classification for Patient Safety to facilitate the global exchange and dissemination of information among users of disparate incident reporting systems. The Joint Commission International Center for Patient Safety is the operational arm for this collaboration.

- The Joint Commission International Center for Patient Safety has convened a “Champions for Patient Safety” group to address “macro” issues in patient safety.

- The Joint Commission helped form and is a member of the National Coordinating Council on Medication Error Reporting & Prevention, a coalition of 22 member organizations that developed principles for constructing patient safety reporting programs.

- The Joint Commission is a founding member and serves on the board of the National Patient Safety Foundation.

- As an initial board member of the National Quality Forum, The Joint Commission is working with the NQF to create consensus around nationally agreed-upon measures for quality and safety. The Joint Commission is also participating in a steering committee that has identified a series of serious reportable events to be used by organizations that set up adverse event reporting systems. As a member of the NQF Maintenance Committee for the “Safe Practices for Better Health Care,” The Joint Commission is working to harmonize those safe practices with the National Patient Safety Goals.

- The Joint Commission is an affiliate of Consumers Advancing Patient Safety, a national consumer-led organization that serves as a collective voice for individuals, families and healers who suffer harm in health care encounters.
The Joint Commission is also involved in the High 5s initiative, established through the collaboration of the
Commonwealth Fund, the WHO World Alliance for Patient Safety and the WHO Collaborating Centre for Patient
Safety. The High 5s initiative's goal is to implement innovative, standardized operating protocols for five patient
safety solutions over five years. The solutions are:

- Prevention of patient care hand-over errors.
- Prevention of wrong site / wrong procedure / wrong person surgical errors.
- Prevention of continuity of medication errors.
- Prevention of high concentration drug errors.
- Promotion of effective hand hygiene practices.

This initiative works to implement solutions that would broadly prevent avoidable catastrophic adverse events causing
death or serious injury in hospitals.

The Joint Commission also conducts patient safety-related research, publishes books and organizes conferences
on patient safety, evaluates complaints and reports of concerns about Joint Commission-accredited health care
organizations, and publicly discloses information about accredited organizations through Quality Reports
(available at www.qualitycheck.org).
Hospital Quality Performance

Accredited U.S. hospitals continue to demonstrate measurable improvements in quality. Still, much room for improvement remains. Also, significant variability exists in the performance of hospitals by state, as well as between the highest- and lowest-performing hospitals.

The Joint Commission measures quality improvement by tracking hospital performance in providing common treatments shown by scientific evidence to lead to the best outcomes for patients. The data demonstrate that patients are more consistently receiving these “evidence-based” treatments. Quality improvement in hospitals contributes to saved lives, better health and quality of life for patients, as well as to lower health care costs.

All improvements in performance are statistically significant. Many of the smaller percentage improvements occurred within large patient populations, meaning that significantly more patients received the benefits of evidence-based treatments. Also, in some cases, performance was already quite high and there was less room for improvement.

Hospitals Improved Performance On 19 Individual Measures Of Quality

Between 2002 and 2006, hospitals consistently improved the quality of care provided for heart attack, heart failure and pneumonia, according to an analysis of 13 individual measures of performance quality by The Joint Commission. Improvement also was demonstrated on six other measures of quality relating to heart attack care, pneumonia care and surgical care* tracked from 2005-2006. There were two new pneumonia care measures tracked for the first time in 2006. More than 3,000 hospitals contributed data. Six of the 13 measures analyzed from 2002-2006 apply to heart attack care, four to heart failure care and three to pneumonia care. Of the six measures tracked during 2005-2006, one relates to heart attack care, three to pneumonia care and two** to surgical care. There were two new pneumonia care measures tracked for the first time in 2006.

The magnitude of national improvement on individual evidence-based measures tracked from 2002-2006 ranged from 3.6 percent to 52.2 percent, and improvement has increased steadily since 2002. The performance of hospitals improved the most on measures where performance was lower at the beginning of the tracking period. On measures tracked for the first time in 2005, performance is generally lower and more variable than on the performance for measures tracked since 2002, showing a correlation between performance measurement and quality.

There were some dramatic improvements over the five-year period of data collection, especially in providing smoking cessation advice. For example, hospitals provided this advice to 89.4 percent of pneumonia patients in 2006 compared with 37.2 percent in 2002. Hospitals also showed greatly improved results from 2002 to 2006 in providing this advice to heart attack patients (to 96.6 percent from 66.6 percent) and heart failure patients (to 92.1 percent from 42.2 percent). Other strong improvements included providing discharge instructions to heart failure patients (to 70.3

*In 2006, the Surgical Infection Prevention Project was renamed the Surgical Care Improvement Project to encompass more areas of surgical care.

**There are two surgical care measures that each report rates on seven specific surgical procedures, as well as the overall measure rate. Improvement was seen in all 16 measure rates.
percent from 30.9 percent) and providing pneumococcal screening and vaccination to pneumonia patients (to 75.8 percent from 30.2 percent).

For more detail on these results, see the Quality Performance Detail section of the report.

National Performance Improvement Rates
Heart Attack, Heart Failure And Pneumonia Care

Heart Attack Care: National Rates by Year

Key to abbreviations: ACEI: Angiotensin converting enzyme inhibitor, ARB: angiotensin receptor blocker, LVF: Left ventricular function. See Glossary for definitions.
National Performance Improvement Rates
Heart Attack, Heart Failure And Pneumonia Care (continued)

Heart Failure Care: National Rates by Year

Key to abbreviations: ACEI: Angiotensin converting enzyme inhibitor, ARB: angiotensin receptor blocker, LVF: Left ventricular function. See Glossary for definitions.
National Performance Improvement Rates
Heart Attack, Heart Failure And Pneumonia Care (continued)

Pneumonia Care: National Rates by Year

See Glossary for definitions.
Hospitals Improved Performance On Composite Measures Of Quality

Hospitals also improved on “composite” measures showing how consistently they provided “evidence-based” care. Composite measures combine the results of all individual measures on a similar medical condition into a single percentage rating calculated by adding or “rolling up” the number of times recommended care was provided to patients and dividing this sum by the total number of opportunities to provide this care. From 2002 to 2006, all three composite measures of quality improved: 86.9 percent to 94.4 percent for heart attack care, 59.7 percent to 84.1 percent for heart failure care, and 72.3 percent to 87.3 percent for pneumonia care.

Performance Improvement on Composite Measures, 2002-2006
Performance Summary, Composite And Individual Measures

Each set’s results are ranked by 2002-2006 improvement. All improvements 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.

<table>
<thead>
<tr>
<th>Performance measure</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2002-2006 improvement (percentage points)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart attack care composite</td>
<td>86.9%</td>
<td>89.8%</td>
<td>91.5%</td>
<td>90.0%</td>
<td>94.4%</td>
<td>7.5%</td>
</tr>
<tr>
<td>Providing aspirin at arrival</td>
<td>93.0%</td>
<td>94.3%</td>
<td>94.7%*</td>
<td>95.5%*</td>
<td>96.6%</td>
<td>3.6%</td>
</tr>
<tr>
<td>Prescribing aspirin at discharge</td>
<td>92.0%</td>
<td>93.7%</td>
<td>94.5%</td>
<td>95.6%</td>
<td>96.6%</td>
<td>4.6%</td>
</tr>
<tr>
<td>Prescribing ACE inhibitor/ARB at discharge</td>
<td>75.8%</td>
<td>78.3%</td>
<td>79.9%</td>
<td>83.6%</td>
<td>86.7%</td>
<td>10.9%</td>
</tr>
<tr>
<td>Providing smoking cessation advice</td>
<td>66.6%</td>
<td>76.2%</td>
<td>84.3%*</td>
<td>92.1%</td>
<td>96.6%</td>
<td>30.0%</td>
</tr>
<tr>
<td>Prescribing a beta blocker at discharge</td>
<td>87.3%</td>
<td>90.3%</td>
<td>92.5%</td>
<td>94.8%</td>
<td>96.2%</td>
<td>8.9%</td>
</tr>
<tr>
<td>Prescribing a beta blocker at arrival</td>
<td>85.0%</td>
<td>88.2%</td>
<td>90.0%</td>
<td>92.2%</td>
<td>93.6%</td>
<td>8.6%</td>
</tr>
<tr>
<td>Providing fibrinolytic therapy within 30 minutes of arrival†</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>38.6%</td>
<td>42.5%</td>
<td>3.9%</td>
</tr>
<tr>
<td>Heart failure care composite</td>
<td>59.7%</td>
<td>66.3%</td>
<td>71.2%</td>
<td>76.0%</td>
<td>84.1%</td>
<td>24.4%</td>
</tr>
<tr>
<td>Providing discharge instructions</td>
<td>30.9%</td>
<td>42.4%</td>
<td>49.6%</td>
<td>59.2%</td>
<td>70.3%</td>
<td>39.4%</td>
</tr>
<tr>
<td>Providing left ventricular function assessment</td>
<td>81.5%</td>
<td>84.5%</td>
<td>87.5%</td>
<td>90.9%*</td>
<td>93.4%</td>
<td>11.9%</td>
</tr>
<tr>
<td>Providing smoking cessation advice</td>
<td>42.2%</td>
<td>56.8%</td>
<td>69.6%*</td>
<td>83.9%*</td>
<td>92.1%</td>
<td>49.9%</td>
</tr>
<tr>
<td>Prescribing ACE inhibitor/ARB at discharge</td>
<td>74.2%</td>
<td>75.8%</td>
<td>76.3%</td>
<td>83.0%</td>
<td>85.6%</td>
<td>11.4%</td>
</tr>
<tr>
<td>Pneumonia care composite</td>
<td>72.3%</td>
<td>76.1%</td>
<td>79.9%</td>
<td>81.0%</td>
<td>87.3%</td>
<td>15.0%</td>
</tr>
<tr>
<td>Measuring oxygen in the bloodstream</td>
<td>95.0%</td>
<td>97.2%</td>
<td>98.6%</td>
<td>99.3%</td>
<td>99.6%</td>
<td>4.6%</td>
</tr>
<tr>
<td>Providing pneumococcal screening &amp; vaccination</td>
<td>30.2%</td>
<td>37.6%</td>
<td>48.8%</td>
<td>62.9%*</td>
<td>75.8%</td>
<td>45.6%</td>
</tr>
<tr>
<td>Taking a blood test before giving antibiotics**</td>
<td>82.0%</td>
<td>82.3%</td>
<td>82.2%</td>
<td>83.1%</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Taking a blood test before giving antibiotics in ICU**</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>90.4%</td>
<td>N/A</td>
</tr>
<tr>
<td>Taking a blood test before giving antibiotics in ED**</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>90.1%</td>
<td>N/A</td>
</tr>
<tr>
<td>Providing smoking cessation advice</td>
<td>37.2%</td>
<td>50.2%</td>
<td>65.5%</td>
<td>80.1%*</td>
<td>89.4%</td>
<td>52.2%</td>
</tr>
</tbody>
</table>

* This number varies from that in the previous report due to later additional data submissions and/or corrections to previously submitted data.

**The measure of taking a blood test before giving antibiotics was split into two measures in 2006 – giving antibiotics in the intensive care unit (ICU) and giving antibiotics in the emergency department (ED).

† In 2006, this measure changed from “thrombolytic” to “fibrinolytic” therapy. 2005 was the first year this measure was tracked.
Performance Summary, Composite And Individual Measures (continued)

The following performance measures were introduced for the first time in 2004; 2005 was the first full year of reported data.

<table>
<thead>
<tr>
<th>Measure</th>
<th>2005</th>
<th>2006</th>
<th>Improvement (percentage points)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pneumonia care</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Providing antibiotics within four hours of arrival</td>
<td>74.5%*</td>
<td>79.0%</td>
<td>4.5%</td>
</tr>
<tr>
<td>Providing antibiotics to intensive care unit patients within 24 hours of arrival</td>
<td>50.2%*</td>
<td>59.8%</td>
<td>9.6%</td>
</tr>
<tr>
<td>Providing antibiotics to non-intensive care unit patients within 24 hours of arrival</td>
<td>84.0%*</td>
<td>88.8%</td>
<td>4.8%</td>
</tr>
<tr>
<td><strong>Surgical care</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Providing surgical patients with antibiotics within one hour before the first surgical cut</td>
<td>81.8%</td>
<td>86.7%</td>
<td>4.9%</td>
</tr>
<tr>
<td>For coronary artery bypass graft (CABG) surgery</td>
<td>85.2%</td>
<td>87.6%</td>
<td>2.4%</td>
</tr>
<tr>
<td>For cardiac surgery (other than CABG)</td>
<td>83.8%</td>
<td>87.1%</td>
<td>3.3%</td>
</tr>
<tr>
<td>For colon surgery</td>
<td>72.2%*</td>
<td>78.0%</td>
<td>5.8%</td>
</tr>
<tr>
<td>For hip joint replacement surgery</td>
<td>81.3%*</td>
<td>86.8%</td>
<td>5.5%</td>
</tr>
<tr>
<td>For hysterectomy surgery</td>
<td>82.3%</td>
<td>87.0%</td>
<td>4.7%</td>
</tr>
<tr>
<td>For knee joint replacement surgery</td>
<td>85.1%*</td>
<td>90.4%</td>
<td>5.3%</td>
</tr>
<tr>
<td>For vascular surgery</td>
<td>75.2%</td>
<td>81.1%</td>
<td>5.9%</td>
</tr>
<tr>
<td><strong>Stopping antibiotics within 24 hours after surgery</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>For coronary artery bypass graft (CABG) surgery</td>
<td>70.0%</td>
<td>86.8%</td>
<td>16.8%</td>
</tr>
<tr>
<td>For cardiac surgery (other than CABG)</td>
<td>63.0%</td>
<td>85.7%</td>
<td>22.7%</td>
</tr>
<tr>
<td>For colon surgery</td>
<td>61.5%</td>
<td>65.2%</td>
<td>3.7%</td>
</tr>
<tr>
<td>For hip joint replacement surgery</td>
<td>69.0%</td>
<td>74.7%</td>
<td>5.7%</td>
</tr>
<tr>
<td>For hysterectomy surgery</td>
<td>88.0%</td>
<td>89.1%</td>
<td>1.1%</td>
</tr>
<tr>
<td>For knee joint replacement surgery</td>
<td>69.3%</td>
<td>76.0%</td>
<td>6.7%</td>
</tr>
<tr>
<td>For vascular surgery</td>
<td>65.4%</td>
<td>67.2%</td>
<td>1.8%</td>
</tr>
</tbody>
</table>

* This number varies from that in the previous report due to later additional data submissions and/or corrections to previously submitted data.

** There are two surgical care measures (bolded) that each report rates on seven specific surgical procedures, as well as the overall measure rate. Improvement was seen in all 16 measure rates.
Much Room For Improvement Remains

The Joint Commission also tracks the percentage of hospitals achieving the annual targeted performance of 90 percent or more compliance on a measure. This performance result is different than the previously described individual and composite measures, which show the percentage of time an evidence-based treatment is given when it is recommended.

<table>
<thead>
<tr>
<th>Performance measure</th>
<th>2005 High (percentage &gt;90)</th>
<th>2006 High (percentage &gt;90)</th>
<th>2005-2006 difference (percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oxygenation assessment (Pneumonia)</td>
<td>99.1</td>
<td>99.6</td>
<td>0.5</td>
</tr>
<tr>
<td>Aspirin at arrival (Heart Attack)</td>
<td>87.7</td>
<td>93.0</td>
<td>5.4</td>
</tr>
<tr>
<td>Smoking cessation advice (Heart Attack)</td>
<td>72.9</td>
<td>91.5</td>
<td>18.6</td>
</tr>
<tr>
<td>Aspirin at discharge (Heart Attack)</td>
<td>81.9</td>
<td>90.0</td>
<td>8.0</td>
</tr>
<tr>
<td>Beta blocker at discharge (Heart Attack)</td>
<td>80.8</td>
<td>88.7</td>
<td>7.9</td>
</tr>
<tr>
<td>Beta blocker at arrival (Heart Attack)</td>
<td>69.8</td>
<td>79.0</td>
<td>9.1</td>
</tr>
<tr>
<td>Smoking cessation advice (Heart Failure)</td>
<td>49.0</td>
<td>75.2</td>
<td>26.3</td>
</tr>
<tr>
<td>Left ventricular assessment (Heart Failure)</td>
<td>56.2</td>
<td>69.5</td>
<td>13.3</td>
</tr>
<tr>
<td>Blood cultures in the ICU (Pneumonia)*</td>
<td>N/A</td>
<td>66.8</td>
<td>N/A</td>
</tr>
<tr>
<td>Smoking cessation advice (Pneumonia)</td>
<td>37.0</td>
<td>62.8</td>
<td>25.8</td>
</tr>
<tr>
<td>Blood cultures in the ED (Pneumonia)*</td>
<td>N/A</td>
<td>58.3</td>
<td>N/A</td>
</tr>
<tr>
<td>Antibiotic selection – Non ICU (Pneumonia)</td>
<td>24.6</td>
<td>49.3</td>
<td>24.6</td>
</tr>
<tr>
<td>ACE inhibitor prescribed (Heart Attack)</td>
<td>30.1</td>
<td>43.6</td>
<td>13.5</td>
</tr>
<tr>
<td>Antibiotic within 1 hour (Surgical Care)</td>
<td>23.7</td>
<td>39.9</td>
<td>16.2</td>
</tr>
<tr>
<td>ACE inhibitor prescribed (Heart Failure)</td>
<td>27.1</td>
<td>36.1</td>
<td>9.0</td>
</tr>
<tr>
<td>Pneumococcal screening (Pneumonia)</td>
<td>11.5</td>
<td>22.7</td>
<td>11.2</td>
</tr>
<tr>
<td>Antibiotic discontinued within 24 hours (Surgical Care)</td>
<td>16.8</td>
<td>20.1</td>
<td>3.3</td>
</tr>
<tr>
<td>Discharge instructions (Heart Failure)</td>
<td>10.4</td>
<td>17.7</td>
<td>7.3</td>
</tr>
<tr>
<td>Antibiotic within 4 hours of arrival (Pneumonia)</td>
<td>8.5</td>
<td>14.8</td>
<td>6.3</td>
</tr>
<tr>
<td>Fibrinolytics within 30 min of arrival (Heart Attack)</td>
<td>0</td>
<td>10.0</td>
<td>10.0</td>
</tr>
<tr>
<td>PCI within 120 min of arrival (Heart Attack)</td>
<td>6.7</td>
<td>7.8</td>
<td>1.2</td>
</tr>
<tr>
<td>Antibiotic selection – ICU (Pneumonia)</td>
<td>0</td>
<td>0.7</td>
<td>0.7</td>
</tr>
</tbody>
</table>

*The measure of taking a blood test before giving antibiotics was split into two measures in 2006 – giving antibiotics in the intensive care unit (ICU) and giving antibiotics in the emergency department (ED).*
90 percent of American hospitals achieved 90 percent compliance on only four of 22 measures tracked during 2006. The percentage of hospitals with performance over 90 percent ranges from 99.6 percent to 0.7 percent on 22 measures of heart attack, heart failure, pneumonia care and surgical care. The best performance was in providing an oxygenation assessment for pneumonia patients, with 99.6 percentage of hospitals achieving annual overall performance over 90 percent. The other three measures that showed achievement by hospitals of more than 90 percent related to heart attack care. Performance on the other 18 measures ranged from 88.7 percent to 0.7 percent.

While most of the performances on the lower end of the scale involved measures first reported in 2005 or 2006, treatments are still not being performed consistently for some measures introduced in 2002. For example:

- Discharge instructions for heart failure patients – 17.7 percent not being performed consistently
- Pneumococcal screening for pneumonia patients – 22.7 percent not being performed consistently
- ACE inhibitor prescribed at discharge for heart failure patients – 36.1 percent not being performed consistently
- ACE inhibitor prescribed at discharge for heart attack patients – 43.6 percent not being performed consistently

The Joint Commission is working to address these and other issues in a number of ways, including standards, National Patient Safety Goals, and coalitions with other organizations also interested in furthering patient safety (see the section on “The Joint Commission’s Commitment to Safety” for more information).

There was improvement from 2005 to 2006—more hospitals provided certain treatments more than 90 percent of the time. The greatest improvement from 2005 to 2006 was in providing smoking cessation advice for heart failure patients, with 26.3 percent more hospitals providing this treatment 90 percent of the time. Smoking cessation advice was provided 90 percent of the time to pneumonia patients by an increase of 25.8 percent hospitals over 2005, and antibiotics were provided to non-ICU (intensive care unit) pneumonia patients by an increase of 24.6 percent hospitals over 2005. Performance improvement on the other 17 measures ranged from 0.5 percent to 18.6 percent.
Key to abbreviations: ACE: angiotensin converting enzyme; ARB: angiotensin receptor blocker; PCI: percutaneous coronary interventions. See Glossary for definitions.
Significant Differences Exist In The Performance Of Hospitals By State

The performance of hospitals in different states, for example, on the measure of providing discharge instructions to heart failure patients ranged from a high of 91 percent in the highest-performing state to a low of 49.4 percent in the lowest-performing state. On specific measures of surgical care, state variability is as high as 80 percent. From 2005 to 2006, state high performance and low performance improved on all measures of heart attack, heart failure and pneumonia care except for one: providing smoking cessation advice to heart failure patients, where low performance dropped from 76.5 percent in 2005 to 74.4 percent in 2006.

The following table compares the low and high ranges of state performance to national averages. More illustrations of hospital performance by state can be found in the Quality Performance Detail section of this report.

State Performance Variability Compared To National Averages

Each individual measure within set is ranked according to state performance variability, which shows the difference between the highest-performing and lowest-performing states.
### Performance measure

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart attack care</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Providing aspirin at arrival</td>
<td>96.6%</td>
<td>94.9%</td>
<td>99.1%</td>
<td>4.2%</td>
</tr>
<tr>
<td>Prescribing aspirin at discharge</td>
<td>96.6%</td>
<td>94.6%</td>
<td>99.1%</td>
<td>4.5%</td>
</tr>
<tr>
<td>Prescribing ACE inhibitor/ARB at discharge</td>
<td>86.7%</td>
<td>78.0%</td>
<td>94.9%</td>
<td>16.9%</td>
</tr>
<tr>
<td>Providing smoking cessation advice</td>
<td>96.6%</td>
<td>87.8%</td>
<td>99.1%</td>
<td>11.3%</td>
</tr>
<tr>
<td>Prescribing beta blocker at discharge</td>
<td>96.2%</td>
<td>93.7%</td>
<td>99.1%</td>
<td>5.4%</td>
</tr>
<tr>
<td>Providing beta blocker at arrival</td>
<td>93.6%</td>
<td>88.7%</td>
<td>98.0%</td>
<td>9.3%</td>
</tr>
<tr>
<td>Heart failure care</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Providing discharge instructions</td>
<td>70.3%</td>
<td>49.4%</td>
<td>91.0%</td>
<td>41.6%</td>
</tr>
<tr>
<td>Providing left ventricular function assessment</td>
<td>93.4%</td>
<td>77.8%</td>
<td>97.0%</td>
<td>19.2%</td>
</tr>
<tr>
<td>Providing smoking cessation advice</td>
<td>92.1%</td>
<td>74.4%</td>
<td>97.8%</td>
<td>23.4%</td>
</tr>
<tr>
<td>Prescribing ACE inhibitor/ARB at discharge</td>
<td>85.6%</td>
<td>80.5%</td>
<td>92.3%</td>
<td>11.8%</td>
</tr>
<tr>
<td>Pneumonia care</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measuring oxygen in the bloodstream</td>
<td>99.6%</td>
<td>98.9%</td>
<td>100.0%</td>
<td>1.1%</td>
</tr>
<tr>
<td>Providing pneumococcal screening and vaccination</td>
<td>75.8%</td>
<td>55.5%</td>
<td>91.0%</td>
<td>35.5%</td>
</tr>
<tr>
<td>Taking a blood test before giving antibiotics in the ICU*</td>
<td>90.4%</td>
<td>82.2%</td>
<td>95.3%</td>
<td>31.1%</td>
</tr>
<tr>
<td>Taking a blood test before giving antibiotics in the ED*</td>
<td>90.1%</td>
<td>82.2%</td>
<td>94.9%</td>
<td>12.7%</td>
</tr>
<tr>
<td>Providing smoking cessation advice</td>
<td>89.4%</td>
<td>70.9%</td>
<td>95.9%</td>
<td>25.0%</td>
</tr>
<tr>
<td>Providing antibiotics within four hours of arrival</td>
<td>79.0%</td>
<td>69.3%</td>
<td>88.8%</td>
<td>19.5%</td>
</tr>
<tr>
<td>Providing antibiotics for intensive care unit patients within 24 hours of arrival</td>
<td>59.8%</td>
<td>47.4%</td>
<td>74.6%</td>
<td>27.2%</td>
</tr>
<tr>
<td>Providing antibiotics for non-intensive care unit patients within 24 hours of arrival</td>
<td>88.8%</td>
<td>83.7%</td>
<td>93.3%</td>
<td>9.6%</td>
</tr>
<tr>
<td>Surgical care</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Providing surgical patients with antibiotics within one hour before the first surgical cut</td>
<td>86.7%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>For coronary artery bypass graft (CABG) surgery</td>
<td>87.6%</td>
<td>61.8%</td>
<td>100%</td>
<td>38.2%</td>
</tr>
<tr>
<td>For cardiac surgery (other than CABG)</td>
<td>87.1%</td>
<td>50.0%</td>
<td>100%</td>
<td>50.0%</td>
</tr>
<tr>
<td>For colon surgery</td>
<td>78.0%</td>
<td>59.3%</td>
<td>100%</td>
<td>40.7%</td>
</tr>
<tr>
<td>For hip joint replacement surgery</td>
<td>86.8%</td>
<td>20.0%</td>
<td>100%</td>
<td>80.0%</td>
</tr>
<tr>
<td>For hysterectomy surgery</td>
<td>87.0%</td>
<td>67.2%</td>
<td>96.6%</td>
<td>29.4%</td>
</tr>
<tr>
<td>For knee joint replacement surgery</td>
<td>90.4%</td>
<td>50.0%</td>
<td>100%</td>
<td>50.0%</td>
</tr>
<tr>
<td>For vascular surgery</td>
<td>81.1%</td>
<td>50.0%</td>
<td>100%</td>
<td>50.0%</td>
</tr>
<tr>
<td>Stopping antibiotics within 24 hours after surgery</td>
<td>78.9%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>For coronary artery bypass graft (CABG) surgery</td>
<td>86.8%</td>
<td>42.1%</td>
<td>100%</td>
<td>57.9%</td>
</tr>
<tr>
<td>For cardiac surgery (other than CABG)</td>
<td>85.7%</td>
<td>50.0%</td>
<td>100%</td>
<td>50.0%</td>
</tr>
<tr>
<td>For colon surgery</td>
<td>65.2%</td>
<td>16.9%</td>
<td>90.1%</td>
<td>73.2%</td>
</tr>
<tr>
<td>For hip joint replacement surgery</td>
<td>74.7%</td>
<td>22.2%</td>
<td>100%</td>
<td>77.8%</td>
</tr>
<tr>
<td>For hysterectomy surgery</td>
<td>89.1%</td>
<td>67.9%</td>
<td>100%</td>
<td>32.1%</td>
</tr>
<tr>
<td>For knee joint replacement surgery</td>
<td>76.0%</td>
<td>37.8%</td>
<td>100%</td>
<td>62.2%</td>
</tr>
<tr>
<td>For vascular surgery</td>
<td>67.2%</td>
<td>25.0%</td>
<td>100%</td>
<td>75.0%</td>
</tr>
</tbody>
</table>

*The measure of taking a blood test before giving antibiotics was split into two measures in 2006 — giving antibiotics in the intensive care unit (ICU) and giving antibiotics in the emergency department (ED).
Quality and Safety Key Performance Results

National Patient Safety Goal Compliance

Each year, health care providers must meet the requirements of The Joint Commission’s National Patient Safety Goals (NPSGs) as part of the accreditation process. In 2006, seven goals and 16 requirements were identified and the compliance assessment results follow. “Compliance” means consistent performance of the requirement. When an organization is found to be “non-compliant,” it does not mean that the organization is failing to do what is required at all; it means that the organization is not doing it consistently.

Hospitals must do more than simply perform specified tasks to achieve compliance with Joint Commission NPSGs. To assure safe health care environments, hospitals must continually analyze fundamental workflow systems and redesign those systems as needed. Hospitals must go beyond the tasks of removing a dangerous medication from a patient care unit or requiring a specific safety feature on a medical device. They must achieve goals such as “improve the accuracy of patient identification” by changing how individuals caring for patients do their jobs. Achieving this kind of behavioral change among providers takes time, motivation, reinforcement, reward, patience, and support.

The Joint Commission conceptually supports the National Quality Forum’s 30 consensus safe practices for health care organizations. However, The Joint Commission prefers an approach to improving performance that focuses on a smaller number of goals specifically because of the challenges posed by systems redesign and the culture change that needs to happen in order to keep error from reaching the patient.

How National Patient Safety Goals Are Determined

The Joint Commission’s Sentinel Event database maintains an active repository of information on serious adverse events reported by hospitals across the country. A Sentinel Event Advisory Group – composed of physicians, nurses, pharmacists, risk managers and other safety experts – works with Joint Commission staff to review these and other data and literature to identify potential new NPSGs and requirements on a continuing basis. As part of this development process, potential Goals and associated requirements are sent to organizations representing providers, consumers, purchasers and other interested parties for review and comment each year.

To determine its priority NPSGs and requirements each year, the Advisory Group considers evidence respecting measuring their potential overall impact on patient safety, as well as the cost and practicality of implementation. The proposed NPSGs and requirements are then presented to The Joint Commission’s Board of Commissioners for final review and approval. The Advisory Group may also recommend the retirement of selected NPSGs and requirements each year.
**2006 Performance**

The compliance rates below are derived from 1,429 on-site surveys at Joint Commission-accredited hospitals during 2006.

**Goal 1: Improve the accuracy of patient identification.**

**Requirement 1A:** Use at least two patient identifiers (neither to be the patient’s room number) whenever administering medications or blood products; taking blood samples and other specimens for clinical testing, or providing any other treatments or procedures.

<table>
<thead>
<tr>
<th>Compliance</th>
<th>Non-compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>92%</td>
<td>8%</td>
</tr>
</tbody>
</table>

**Requirement 1B:** Prior to the start of any surgical or invasive procedure, conduct a final verification process, such as a “time out,” to confirm the correct patient, procedure and site, using active—not passive—communication techniques.

<table>
<thead>
<tr>
<th>Compliance</th>
<th>Non-compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>74.2%</td>
<td>25.8%</td>
</tr>
</tbody>
</table>

*Note: This requirement is surveyed under The Joint Commission’s Universal Protocol for Preventing Wrong Site, Wrong Procedure, Wrong Person Surgery™.*

**Goal 2: Improve the effectiveness of communication among caregivers.**

**Requirement 2A:** For verbal or telephone orders or for telephonic reporting of critical test results, verify the complete order or test result by having the person receiving the order or test result “read-back” the complete order or test result.

<table>
<thead>
<tr>
<th>Compliance</th>
<th>Non-compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>84.3%</td>
<td>15.7%</td>
</tr>
</tbody>
</table>
Requirement 2B: Standardize a list of abbreviations, acronyms and symbols that are not to be used throughout the organization.

63% compliance

37% non-compliance

Requirement 2C: Measure, assess and, if appropriate, take action to improve the timeliness of reporting, and the timeliness of receipt by the responsible licensed caregiver, of critical test results and values.

73% compliance

27% non-compliance

Requirement 2E: Implement a standardized approach to “hand-off” communications, including an opportunity to ask and respond to questions.

94% compliance

6% non-compliance

Goal 3: Improve the safety of using medications.

Requirement 3B: Standardize and limit the number of drug concentrations available in the organization.

98.3% compliance

1.7% non-compliance

Requirement 3C: Identify and, at a minimum, annually review a list of look-alike/sound-alike drugs used in the organization, and take action to prevent errors involving the interchange of these drugs.

92.6% compliance

7.4% non-compliance

Requirement 3D: Label all medications, medication containers (e.g., syringes, medicine cups, basins), or other solutions on and off the sterile field in perioperative and other procedural settings.

91% compliance

9% non-compliance

Requirement 4A: Create and use a preoperative verification process, such as a checklist, to confirm that appropriate documents (e.g., medical records, imaging studies) are available.

97% compliance

3% non-compliance

Note: This requirement is surveyed under The Joint Commission’s Universal Protocol for Preventing Wrong Site, Wrong Procedure, Wrong Person Surgery™.

Requirement 4B: Implement a process to mark the surgical site and involve the patient in the marking process.

93.4% compliance

6.6% non-compliance

Note: This requirement is surveyed under The Joint Commission’s Universal Protocol for Preventing Wrong Site, Wrong Procedure, Wrong Person Surgery™.

Goal 7: Reduce the risk of health care-associated infections

Requirement 7A: Comply with current Centers for Disease Control and Prevention (CDC) hand hygiene guidelines.

91.2% compliance

8.8% non-compliance

Requirement 7B: Manage as sentinel events all identified cases of unanticipated death or major permanent loss of function associated with a health care-associated infection.

100% compliance

0% non-compliance
**Goal 8: Accurately and completely reconcile medications across the continuum of care.**

**Requirement 8A:** Implement a process for obtaining and documenting a complete list of the patient’s current medications upon the patient’s admission to the organization and with the involvement of the patient. This process includes a comparison of the medications the organization provides to those on the list.

- **66% compliance**
- **34% non-compliance**

**Requirement 8B:** A complete list of the patient’s medications is communicated to the next provider of service when a patient is referred or transferred to another setting, service, practitioner or level of care within or outside the organization.

- **72.5% compliance**
- **27.5% non-compliance**

**Goal 9: Reduce the risk of patient harm resulting from falls.**

**Requirement 9B:** Implement a fall reduction program and evaluate the effectiveness of the program.

- **93.5% compliance**
- **6.5% non-compliance**
National Patient Safety Goals Compliance Trends, 2003-2006

The following chart illustrates trends in National Patient Safety Goal compliance from 2003-2006. The compliance rates are derived from on-site surveys at Joint Commission-accredited hospitals during those years. The trends in the data should be interpreted with caution. At first glance, it looks like performance may be deteriorating. However, the more likely explanation is that Joint Commission surveyors are becoming more sophisticated in assessing and identifying non-compliance.

For example, the 2004 hospital compliance rate for conducting a “time out” before surgery was 92.0 percent, compared to 74.2 percent in 2006. When the “time out” requirement was first implemented, it was surveyed primarily in the operating rooms. In these areas, performance of the “time out” is generally quite consistent. But “time out” is not just an OR requirement; it applies wherever invasive procedures are done. More recently, surveyors are finding non-compliance with the “time out” requirement in endoscopy suites, catheterization labs, and even at bedside procedures.

Also, some requirements call for significant behavioral change. For example, the “do not use” abbreviations requirement asks practitioners to stop doing what they were taught to do in medical school and residency training. Writing out full names of medicines is seen as less efficient than using abbreviations and other “concise” notations.

The numbers represent percentages, except the second row, which represents the number of surveys conducted.

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The requirement was implemented in later years or was not applicable that year.

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Improving America’s Hospitals: The Joint Commission’s Annual Report on Quality and Safety
EVALUATING LOCAL HOSPITAL PERFORMANCE

Health care consumers can assure the best care for themselves and their families by comparing hospital quality and safety, asking doctors questions, considering options, and making informed decisions. The most comprehensive directory of health care facilities available, Quality Check® — www.qualitycheck.org — helps to educate the public about the choices available to them. Individuals may freely view and download hospital-specific performance measurement data from The Joint Commission’s Quality Check website, which now includes organizations that are not accredited by The Joint Commission, as well as Joint Commission-accredited organizations. Joint Commission-accredited organizations are easily identified by The Joint Commission’s Gold Seal of Approval™. The non-accredited organizations added will include several thousand home care, long-term care, and ambulatory care organizations.

The Joint Commission strives to make the information provided on Quality Check as understandable and clear as possible so that people can make more informed decision about their care. Feedback from both health care professionals and consumers was used recently to guide the redesign of the website and to refine and clarify the Quality Reports on each accredited health care organization.

As shown in the following illustration, health care consumers can search by hospital name, zip code or state at www.qualitycheck.org.
Results for a specific hospital can be viewed online, or a Quality Report can be downloaded and printed.
Understanding Quality Check’s Performance Measurement Data

The performance measurement data is organized into hospital performance against National Patient Safety Goals (NPSGs) and National Quality Improvement Goals (NQIGs). Overall performance is signified by either a “√” or “—.” For NPSGs, the “√” or “—” signifies whether or not the hospital has implemented the Goal requirement. For NQIGs, a “√” means the hospital’s performance is equal to or better than the national average. A “—” means the hospital’s performance is below average.

Hospital performance against NQIGs is also reported for core measure sets, each of which relates to a condition of care. The core measure sets are heart attack care, heart failure care, pneumonia care, pregnancy care, and surgical care. Hospitals are required to pick a minimum of three measure sets and submit data for all the measures within a measure set. Each measure is either a process measure or an outcome measure. A process measure describes how often a recommended treatment or activity is done (for example, a treatment such as aspirin at arrival) in a patient population over a set time period. A process measure is expressed as a percentage, or rate, of the total number of patients for whom the treatment or activity was recommended. An outcome measure describes the end result of a function or process in a patient population over a set period of time. An outcome measure is expressed as a percentage, or rate, of the total number of patients at risk for the outcome.

The data in each hospital’s report includes:

- **Hospital Compliance Result.** The percentage of time the hospital performed the measure when it was recommended.

- **Total Patients.** The total number of patients treated with the measure.

- **Nationwide - Average Rate.** The average performance rate for all Joint Commission-accredited health care organizations in the nation that provided results for a measure. The average rate is calculated by dividing the total number of patients who received the recommended care provided for a measure by the total number of patients who met the inclusion and exclusion criteria for that measure.

- **Nationwide - Top 10%.** The percentage of time hospitals with results in the nation’s top 10 percent for that measure provided the recommended treatment.

- **Statewide - Average Rate.** The average performance rate for all Joint Commission-accredited health care organizations in the state that provided results for a measure. The average rate is calculated by dividing the total number of patients who received the recommended care provided for a measure by the total number of patients who met the inclusion and exclusion criteria for that measure in the state.

- **Statewide - Top 10%.** The percentage of time hospitals with results in the state’s top 10 percent for that measure provided the recommended treatment.

Hospitals submit data to an intermediary called a performance measurement system, which aggregates a hospital’s data and sends this aggregated data to The Joint Commission quarterly. The Joint Commission then aggregates this quarterly data over the last four reported quarters for reporting on Quality Check.
Uses of Quality Check Data

Quality Check data includes national rates, state rates, and hospital rates at the measure level. Data may be analyzed in many ways. Comparisons may be made from the hospital to national/state level. Comparisons between hospitals may be made. Hospitals with known similar characteristics may have their rates combined and compared to various benchmarks, either provided by The Joint Commission data download or to an outside credible source. To be valid, comparisons must be consistent and use the same measures.

Individuals can download any of the performance measure results available for hospitals on Quality Check by clicking on the Quality Data Download tab. The information—which is provided free of charge to any external third party—can then be saved electronically or printed out. The availability of this data supports the Joint Commission’s commitment to transparency in calculating performance measures and allows for flexibility in customizing performance measure results for use in performance improvement initiatives and quality of care-related reporting.

Top Standards Compliance Issues

Each year, The Joint Commission identifies top compliance issues – standards that were the most difficult for hospitals to meet. In 2006, nine issues were identified due to suboptimal compliance rates ranging from 83 to 42 percent.

While compliance with the standards at all times is the goal of Joint Commission-accredited organizations—and the intent behind accreditation—there are times when it is impossible to attain that high level of achievement consistently. That’s why we emphasize continuous improvement through accreditation.

Health care is changing daily; there are new, more effective treatments, medications, and processes of care, as well as emerging technologies and systems. Some health care organizations are challenged to find resources to keep up with the all of the demands for newer, better ways to deliver care. Joint Commission accreditation is changing to meet these needs.

We provide organizations with tools to help them track their performance complying with standards and measuring improvement. Each year, we publish the top standards compliance issues—those standards that are the most difficult for health care organizations to meet.

The hospital manages safety risks.

83% compliance

17% non-compliance
Top Standards Compliance Issues (continued)

Improve the safety of using medications.

- 83% compliance
- 17% non-compliance

The hospital has a complete and accurate medical record for patients assessed, cared for, treated, or served.

- 82% compliance
- 18% non-compliance

Pain is assessed in all patients.

- 81% compliance
- 19% non-compliance

Medication orders are written clearly and transcribed accurately.

- 74% compliance
- 26% non-compliance
Top Standards Compliance Issues (continued)

The organization fulfills the expectations set forth in the Universal Protocol.

- 70% compliance
- 30% non-compliance

Medications are properly and safely stored.

- 56% compliance
- 44% non-compliance

Accurately and completely reconcile medications across the continuum of care.

- 54% compliance
- 46% non-compliance

Improve the effectiveness of communication among caregivers.

- 42% compliance
- 58% non-compliance
SENTINEL EVENT ROOT CAUSE AND TREND DATA

By identifying causes, trends, settings and outcomes of sentinel events, The Joint Commission can provide critical information in the prevention of sentinel events to accredited health care organizations and the public.

The Joint Commission’s Sentinel Event database contains information about serious adverse events, known as “sentinel events” that occur in accredited hospitals throughout the country. These adverse events include medication errors, wrong site surgery, suicide, operative and post-operative complications, and falls, among others. Hospitals submit to The Joint Commission reports of sentinel events, including root causes of the events and strategies to prevent the recurrence of the event. The information for these reports form the basis of the Sentinel Event database.
Inadequate communication between care providers or between care providers and patients/families is consistently the main root cause of sentinel events. Other leading root causes include incorrect assessment of a patient’s physical or behavioral condition and inadequate leadership, orientation or training.
The increasing number of sentinel events reported each year does not necessarily mean that more adverse events are occurring or that hospitals are becoming less safe. Rather, the increasing number is more likely to be due to more consistent reporting of these events. The following graphs illustrate total reported sentinel events and reviewed events by state. While the majority of sentinel event reports are from accredited hospitals, approximately 20 percent are from other accredited organizations, including nursing homes, office-based surgeries and laboratories.
Improving America’s Hospitals

The Joint Commission’s Annual Report on Quality and Safety

2007

Quality and Safety Performance Detail
Quality and Safety Performance Detail

This section of the report includes background information, important facts and statistics, and results for each performance measure in four sets (heart attack care, heart failure care, pneumonia care and surgical care).

A “What one should know about the data” section for each measure includes information about the kinds of patients whose results are excluded from this report's data. It's important to understand that not every patient gets—or should get—a treatment. Often, patients have health care 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.

This report only includes data about patients considered “eligible” for one of the evidence-based treatments or measures.
HEART ATTACK CARE PERFORMANCE DETAIL

What this information tells us

These data illustrate the “composite” measure of how consistently hospitals provided evidence-based care in 2006. The number of hospitals (left axis) is shown in relation to the composite measure rate (bottom axis) for six of the seven evidence-based heart attack treatments or measures evaluated in this report. Data represented by this illustration were reported by 2,547 total hospitals.

Results

During 2006, the national average for providing six of the seven evidence-based heart attack treatments or measures evaluated in this report was 94.4 percent, an improvement of 7.5 percentage points from 2002, when The Joint Commission began tracking performance on heart attack measures. The bars on the chart show the approximate number of hospitals achieving varying composite measure rates, which are plotted on a scale of 30 to 100 percent in 2.5 percent intervals. For example, the highest bar shows that more than 1,200 hospitals achieved a composite measure rate of more than 94 percent in 2006.

What one should know about the data

Hospitals were required to have a minimum of 30 patients over a 12-month period in order to report these data. That was the minimum sample size required for a hospital to receive a rating on Quality Check.
What this information tells us

These data report the percentage of heart attack patients who both needed and received aspirin within 24 hours before or after arriving at the hospital.

What’s important to know about aspirin and heart attack treatment

• The American Heart Association recommends aspirin use for patients who have had a heart attack (unless the patient has other conditions that prevent him or her from safely taking aspirin.) 2, 35, 36

• For certain types of heart attack, aspirin is beneficial because it reduces the tendency of blood to clot in blood vessels of the heart and improves the chance a patient will survive. 2, 35, 36

• National guidelines strongly recommend the early administration of aspirin for some heart attack patients. Some patients are allergic to aspirin, or are taking medicines that cannot be taken with aspirin, among other reasons. 2, 3, 35, 36

• Do not start aspirin therapy without first consulting your doctor; the risks and benefits vary for each person. 1, 35, 36
Results

- In 2006, Joint Commission-accredited hospitals achieved **average performance of 96.6 percent** in providing heart attack patients with aspirin within 24 hours of arriving at the hospital—**an improvement of 1.1% percentage points** from 2005, of 1.9% percentage points from 2004, of 2.3 percentage points from 2003, and of 3.6 percentage points from 2002.

- Performance rates among states ranged from 94.9 to 99.1 percent.

What one should know about the data

- Only four hospitals in Wyoming underwent on-site surveys during 2006.

- Some heart attack patients received this treatment but were excluded from these data for one or more of the following reasons:
  - The patient did not receive aspirin due to an allergy to aspirin or other medical reasons.
  - The patient was younger than 18 years of age.
  - The patient was transferred to another acute care or federal hospital on the day of arrival.
  - The patient was transferred from another acute care hospital, including another emergency department.
  - The patient was discharged on the same day of arrival at the hospital.
  - The patient left against medical advice on the day of arrival.
  - The patient received comfort care only.
  - The patient died on the day of arrival at the hospital.

* This number varies from that in the previous report due to later additional data submissions and/or corrections to previously submitted data.
What this information tells us

These data report how often aspirin was prescribed to some heart attack patients when they left the hospital.

What's important to know about taking aspirin after having a heart attack

• The American Heart Association recommends aspirin use for patients who have had a heart attack (unless the patient has other conditions that prevent him or her from safely taking aspirin.) 2, 35, 36

• For certain types of heart attack, aspirin is beneficial because it reduces the tendency of blood to clot in blood vessels of the heart and improves the chance a patient will survive. 2, 35, 36

• National guidelines strongly recommend that some heart attack patients continue to take aspirin to prevent another heart attack. Some patients are allergic to aspirin, or are taking medicines that cannot be taken with aspirin, among other reasons. 2, 3, 35, 36

• Do not start aspirin therapy without first consulting your doctor; the risks and benefits vary for each person. 1, 35, 36
Results

• In 2006, Joint Commission-accredited hospitals achieved national average performance of **96.6 percent** in prescribing aspirin to heart attack patients at hospital discharge—an improvement of **1.0 percentage points** from 2005, of 2.1 percentage points from 2004, of 2.9 percentage points from 2003, and of 4.6 percentage points from 2002.

• Performance rates among states ranged from 94.6 to 99.1 percent.

What one should know about the data

• During 2006, 58 hospitals in Louisiana and 90 hospitals in Florida underwent on-site surveys.

• Some heart attack patients received this treatment but were excluded from these data for one or more of the following reasons:
  – The patient did not receive aspirin due to an allergy to aspirin or other medical reasons.
  – The patient was younger than 18 years of age.
  – The patient was transferred to another acute care or federal hospital.
  – The patient was discharged to hospice.
  – The patient left against medical advice.
  – The patient received comfort care only.
  – The patient died.
What this information tells us

These data report the percentage of heart attack patients (those with problems in a certain part of the heart’s left ventricle) who received a prescription for a medicine called an ACE inhibitor or an ARB when they were discharged from the hospital. ACE stands for angiotensin converting enzyme. ARB stands for angiotensin receptor blocker. ACE inhibitors, also called ACEIs, and ARBs are medicines taken by mouth that reduce blood pressure and strengthen the heart beat.

What’s important to know about ACE inhibitors, ARBs, and heart attack

• Studies show that heart attack patients who are treated with an ACE inhibitor and ARB medicine live longer than patients who do not take these medications. 4, 35, 36

• National guidelines strongly recommend ACE inhibitor and ARB medicines for heart attack patients. 5, 35, 36
Results

• In 2006, Joint Commission-accredited hospitals achieved national average performance of 86.7 percent in prescribing an ACE inhibitor or ARB medication to heart attack patients discharged from the hospital—an improvement of 3.1 percentage points from 2005, of 6.8 percentage points from 2004, of 8.4 percentage points from 2003, and of 10.9 percentage points from 2002.

• Performance rates among states ranged from 78.0 to 94.9 percent.

What one should know about the data

• Some heart attack patients received this treatment but were excluded from these data for one or more of the following reasons:
  – The patient did not receive an ACE inhibitor or ARB medication due to an allergy to these medications or other medical reasons.
  – The patient was younger than 18 years of age.
  – The patient was transferred to another acute care or federal hospital.
  – The patient was discharged to hospice.
  – The patient left against medical advice.
  – The patient received comfort care only.
  – The patient died.
**What this information tells us**

These data report the percentage of heart attack patients who were given advice or counseling about quitting smoking.

**What’s important to know about smoking and heart attack**

- More than 25 percent of adult American men and 20 percent of adult American women are smokers.\(^6\),\(^35\),\(^36\)
- Studies show that smokers are more likely to quit smoking if a doctor advises them to do so.\(^7\),\(^35\),\(^36\)
- One year after quitting smoking, a person’s risk of heart disease decreases by 50 percent.\(^6\),\(^35\),\(^36\)
- National guidelines strongly recommend smoking cessation counseling for heart attack patients who smoke.\(^8\),\(^35\),\(^36\)
Results

• In 2006, Joint Commission-accredited hospitals achieved **national average performance of 96.6 percent** in advising heart attack patients to quit smoking—**an improvement of 4.5 percentage points** from 2005, of 12.3* percentage points from 2004, of 20.4 percentage points from 2003, and of 30.0 percentage points from 2002.

• There is significant variability across the nation, with performance rates among states ranging from 87.8 to 99.1 percent.

What one should know about the data

• Some heart attack patients received smoking cessation advice but were excluded from these data for one or more of the following reasons:
  – The patient was younger than 18 years of age.
  – The patient was transferred to another acute care or federal hospital.
  – The patient was discharged to hospice.
  – The patient left against medical advice.
  – The patient received comfort care only
  – The patient died.

* This number varies from that in the previous report due to later additional data submissions and/or corrections to previously submitted data.
What this information tells us

These data report the percentage of some heart attack patients who received a prescription for a medicine called a beta blocker when they were discharged from the hospital.

What’s important to know about beta blockers after heart attack

• Beta blocker medicine has been shown to reduce further heart damage. 9, 35, 36

• Beta blocker medicine protects the heart by slowing the heart and helping the heart use less energy to pump blood. 1, 35, 36

• National guidelines strongly recommend that heart attack patients continue taking beta blocker medicine to prevent another heart attack. 5, 35, 36
Results

• In 2006, Joint Commission-accredited hospitals achieved national average performance of 96.2 percent in prescribing beta blocker medication to heart attack patients at hospital discharge – an improvement of 1.4 percentage points from 2005, of 3.7 percentage points from 2004, of 5.9 percentage points from 2003, and of 8.9 percentage points from 2002.

• Performance rates among states ranged from 93.7 to 99.1 percent.

What one should know about the data

• Some heart attack patients received this treatment but were excluded from these data for one or more of the following reasons:
  – The patients did not receive a beta blocker medicine due to an allergy to the medication or other medical reasons.
  – The patient was younger than 18 years of age.
  – The patient was transferred to another acute care or federal hospital.
  – The patient was discharged to hospice.
  – The patient left against medical advice.
  – The patient received comfort care only.
  – The patient died.
What this information tells us

These data report the percentage of heart attack patients who received a medicine called a beta blocker within 24 hours after arriving at the hospital.

What’s important to know about beta blockers and heart attack

- Beta blocker medicine has been shown to reduce further heart damage. 9, 35, 36
- National guidelines strongly recommend that heart attack patients receive beta blocker medicine soon after having a heart attack. 5, 35, 36
Results

• In 2006, Joint Commission-accredited hospitals achieved national average performance of 93.6 percent in providing patients with beta blocker medication within 24 hours after arriving at the hospital—an improvement of 1.4 percentage points from 2005, of 3.6 percentage points from 2004, of 5.4 percentage points from 2003, and of 8.6 percentage points from 2002.

• Performance rates among states ranged from 88.7 to 98.0 percent.

What one should know about the data

• Some heart attack patients received this treatment but were excluded from these data for one or more of the following reasons:

  – The patient did not receive a beta blocker medicine due to an allergy to the medication or other medical reasons.
  – The patient was younger than 18 years of age.
  – The patient was transferred to another acute care or federal hospital on the day of arrival at the hospital.
  – The patient was transferred from another acute care hospital, including another emergency department.
  – The patient was discharged on the same day of arrival at the hospital.
  – The patient left against medical advice on the day of arrival.
  – The patient received comfort care only.
  – The patient died on the day of arrival at the hospital.
Heart Attack Care
Fibrinolytic therapy within 30 minutes of hospital arrival: 2006 National Rates

What this information tells us
These data report the percentage of heart attack patients who received a medicine called fibrinolytic therapy within 30 minutes of arriving at the hospital. While fibrinolytic therapy is not appropriate for all heart attack patients, national guidelines establish a 30-minute optimum timeframe for getting this medicine to patients who might benefit from it.

What’s important to know about fibrinolytic therapy and heart attack
• Fibrinolytic therapy is only used in certain types of heart attacks. 10, 35, 36
• Fibrinolytic therapy breaks up blood clots, which 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. 1, 35, 36
• It is important that this medicine be given quickly after a heart attack is diagnosed. 3, 36, 37
• Studies show that each hour of delay in providing fibrinolytic therapy costs nearly two lives per 1,000 heart attack patients. 10, 35, 36
• National guidelines recommend that fibrinolytic therapy be given within 30 minutes of arrival at the hospital to patients who are having the type of heart attack that fibrinolytic therapy helps. 3, 35, 36

Results
• In 2006, Joint Commission-accredited hospitals achieved a national average performance of 42.5 percent in providing fibrinolytic therapy within 30 minutes of the patient’s arrival at the hospital—an improvement of 3.9 percentage points from 2005, when this measure was first recorded. In 2006, the name of this measure changed from “thrombolytic” to “fibrinolytic” therapy.
• While this measure had poor performance nationwide, only 10 individual hospitals were able to publicly report data on this measure because a minimum of 30 patients was required to report data.

What one should know about the data
• Fibrinolytic therapy is only done at certain hospitals since it is a specialized service requiring trained personnel.
• Some heart attack patients received this treatment but were excluded from these data for one or more of the following reasons:
  – The patient was younger than 18 years of age.
  – The patient was transferred from another acute care hospital, including another emergency department.
  – The patient received comfort care only.
Heart Attack Care: National Rates by Year

ACEI/ARB at Discharge

Aspirin at Arrival

Aspirin at Discharge

Beta Blocker at Arrival

Beta Blocker at Discharge

Smoking Cessation Advice

Key to abbreviations: ACEI: Angiotensin converting enzyme inhibitor, ARB: angiotensin receptor blocker, LVF: Left ventricular function. See Glossary for definitions.

What this information tells us

These graphs show the national performance rates of Joint Commission-accredited hospitals over the course of four consecutive years (2002-2006) for six of the seven heart attack measures evaluated in this report.

What’s important to know about heart attack

• Every year, more than 1 million Americans have heart attacks. About half die from the heart attack, and about half of those who die do so within one hour of the start of symptoms and before reaching the hospital. 1, 35, 36
Most people do not seek medical care for two hours or more after symptoms begin. Many people wait 12 hours or longer to seek treatment. Prompt treatment of a heart attack can help prevent or limit lasting damage to the heart and can prevent sudden death.¹, ³⁵, ³⁶

Results

• Joint Commission-accredited hospitals reported steady improvement over the course of the study in six of the seven heart attack measures. The most significant improvement was in providing smoking cessation advice to heart attack patients.

• The best rates of performance were for:
  – Providing aspirin at discharge improved from 92.0 percent in 2002, to 93.7 percent in 2003, to 94.5 percent in 2004, to 95.6 percent in 2005, to 96.6 percent in 2006.
  – Providing aspirin at arrival improved from 93.0 percent in 2002, to 94.3 percent in 2003, to 94.7 percent in 2004, to 95.5* percent in 2005, to 96.6 percent in 2006.
  – Providing beta blocker at discharge improved from 87.3 percent in 2002, to 90.3 percent in 2003, to 92.5 percent in 2004, to 94.8 percent in 2005, to 96.2 percent in 2006.

• In 2002, only 66.6 percent of accredited hospitals were providing smoking cessation advice to heart attack patients. In 2006, there was significant improvement, with 96.6 percent of hospitals providing smoking cessation advice to heart attack patients.

• The greatest need for improvement is for providing fibrinolytic therapy within 30 minutes of arrival at the hospital. With 42.5 percent national performance, this measure had the lowest national performance of all the measures in this report. While this measure had the poorest performance nationwide, only 10 individual hospitals were able to publicly report data on this measure because a minimum of 30 patients was required to report data.

What one should know about the data

• These data measure specific “processes” of care for heart attack. In this instance, the study counts the number of patients receiving the recommended care for heart attack.

• While improvement sometimes is less than 1 percentage point, these are statistically significant improvements because of the larger number of hospitals that reported these data during the time period covered in this graph.

* This number varies from that in the previous report due to later additional data submissions and/or corrections to previously submitted data.
Heart Failure Care Performance Detail

What this information tells us

These data illustrate the “composite” measure of how consistently hospitals provided evidence-based care for heart failure in 2006. The number of hospitals (left axis) is shown in relation to the composite measure rate (bottom axis) for the four evidence-based heart failure treatments or measures evaluated in this report. Data represented by this illustration were reported by 3,074 total hospitals.

Results

During 2006, the national average for providing the four evidence-based heart failure treatments or measures evaluated in this report was 84.1 percent, an improvement of 24.4 percentage points from 2002, when The Joint Commission began tracking performance on heart attack measures. The bars on the chart show the approximate number of hospitals achieving varying composite measure rates, which are plotted on a scale of 0 to 100 percent in 2.5 percent intervals. For example, the highest bars show that most hospitals achieved composite measure rates between roughly 75 to 95 percent in 2006.

What one should know about the data

Hospitals were required to have a minimum of 30 patients in order to report these data. That was the minimum sample size required for a hospital to receive a rating on Quality Check.
What this information tells us

These data report the percentage of heart failure patients who are given specific discharge instructions about their condition and care when they leave the hospital.

What's important to know about heart failure after being hospitalized

• One study showed that during the past 20 years, heart failure has not declined, but survival after being diagnosed has increased. 11, 37

• Patient education about activities, diet, follow-up, medicines, worsening symptoms, and monitoring weight can prevent further hospitalization. National guidelines strongly support patient education. 14, 37
Results

• In 2006, Joint Commission-accredited hospitals achieved **national average performance of 70.3 percent** in providing discharge instructions to heart failure patients—**an improvement of 11.1 percentage points** from 2005, of 20.7 percentage points from 2004, of 27.9 percentage points from 2003, and of 39.4 percentage points from 2002.

• Performance rates among states ranged from 49.4 to 91.0 percent.

What one should know about the data

• Some heart failure patients received discharge instructions but were excluded from these data for one or more of the following reasons:
  – The patient had a left ventricular assist device (LVAD) or heart transplant.
  – The patient was younger than 18 years of age.
  – The patient received comfort care only.
**What this information tells us**

These data report the percentage of heart failure patients who received an in-depth evaluation of the function of the main pumping chamber of the heart (the left ventricle) during their hospitalization, or during pre-admission to, or after discharge from, the hospital.

**What’s important to know about heart failure and left ventricular function assessment**

- The left ventricle is the thickest muscle of the heart and carries the major workload of the heart. 15, 37

- Left ventricular heart failure is one of the most common forms of heart failure in the United States. It is a condition in which the muscles of the left side of the heart (left ventricle) become weakened and have to work harder to pump blood. This type of heart failure often causes breathing difficulties. 16, 37

- The tests that can help determine left ventricular function include echocardiograms, radionuclide angiography and cardiac catheterizations. If the test shows that the left ventricle is not pumping blood effectively, the condition is known as left ventricle systolic dysfunction (LVSD). 16, 37

- National guidelines promote left ventricular function assessment as the single most important test for heart failure patients. 16, 37
Results

- In 2006, Joint Commission-accredited hospitals achieved **national average performance of 93.4 percent** in providing a left ventricular function assessment to heart failure patients—an improvement of 2.5* percentage points from 2005, of 5.9 percentage points from 2004, of 8.9 percentage points from 2003, and of 11.9 percentage points from 2002.

- Performance rates among states ranged from 77.8 to 97.0 percent.

What one should know about the data

- Some heart failure patients had their left ventricular function assessed but were excluded from these data for one or more of the following reasons:
  - The patient had a left ventricular assist device (LVAD) or heart transplant.
  - The patient was younger than 18 years of age.
  - The patient was transferred to another acute care or federal hospital.
  - The patient was discharged to hospice.
  - The patient left against medical advice.
  - The patient received comfort care only.
  - The patient died.

* This number varies from that in the previous report due to later additional data submissions and/or corrections to previously submitted data.
What this information tells us

These data report the percentage of heart failure patients who were given advice or counseling about quitting smoking.

What's important to know about heart failure and smoking

- More than 25 percent of adult American men and 20 percent of adult American women are smokers.6, 37
- Studies show that smokers are more likely to quit smoking if a doctor advises them to stop.7, 37
- One year after quitting smoking, a person’s risk of heart disease decreases by 50 percent.6, 37
- National guidelines strongly recommend smoking cessation counseling for heart failure patients who smoke.8, 37
Results

• In 2006, Joint Commission-accredited hospitals achieved **national average performance of 92.1 percent** in advising heart failure patients to quit smoking—**an improvement of 8.2* percentage points** from 2005, of 22.5* percentage points from 2004, of 35.3 percentage points from 2003, and of 49.9 percentage points from 2002.

• Performance rates among states ranged from 74.4 to 97.8 percent.

What one should know about the data

• Some heart failure patients received smoking cessation advice but were excluded from these data for one or more of the following reasons:
  – The patient had a left ventricular assist device (LVAD) or heart transplant.
  – The patient was younger than 18 years of age.
  – The patient was transferred to another acute care or federal hospital.
  – The patient was discharged to hospice.
  – The patient left against medical advice.
  – The patient received comfort care only.
  – The patient died.

* This number varies from that in the previous report due to later additional data submissions and/or corrections to previously submitted data.
What this information tells us

These data report the percentage of heart failure patients who received a prescription for medicine called an ACE inhibitor or an ARB when they were discharged from the hospital. ACE stands for angiotensin converting enzyme. ARB stands for angiotensin receptor blocker. ACE inhibitors, also called ACEIs, and ARBs are medicines taken by mouth that reduce blood pressure and strengthen the heart beat.

What’s important to know about ACE inhibitors, ARBs, and heart failure

• ACE inhibitor and ARB medicines improve the heart’s ability to pump blood to the body. 17, 37
• Heart failure patients who take ACE inhibitor and ARB medicine have fewer symptoms, are physically better, and reduce their risk of returning to the hospital. 18, 19, 37
• National guidelines strongly recommend ACE inhibitor and ARB medicine for heart failure patients. 14, 37
Results

• In 2006, Joint Commission-accredited hospitals achieved national average performance of 85.6 percent in prescribing ACE inhibitor and/or ARB medication of heart failure patients when they were discharged from the hospital—an improvement of 2.6 percentage points from 2005, of 9.3 percentage points from 2004, of 9.8 percentage points from 2003, and of 11.4 percentage points from 2002.

• Performance rates among states ranged from 80.5 to 92.3 percent.

What one should know about the data

• Some heart failure patients received this treatment but were excluded from these data for one or more of the following reasons:

  – The patient did not receive an ACE inhibitor and/or ARB due to an allergy to the medicine or other medical reasons.

  – The patient had a left ventricular assist device (LVAD) or heart transplant.

  – The patient was younger than 18 years of age.

  – The patient was transferred to another acute care or federal hospital.

  – The patient was discharged to hospice.

  – The patient left against medical advice.

  – The patient received comfort care only.

  – The patient died.
What this information tells us

These graphs show the national performance rates of Joint Commission-accredited hospitals over the course of four consecutive years (2002-2006) for the four heart failure measures evaluated in this report.

Key to abbreviations: ACEI: Angiotensin converting enzyme inhibitor, ARB: angiotensin receptor blocker, LVF: Left ventricular function.
See Glossary for definitions.
What’s important to know about heart failure

• About one in every 100 people over the age of 65 has chronic heart failure. \(^1\), \(^3\)

• Heart failure affects 2 to 3 million Americans. \(^2\), \(^3\)

• From 1999 to 2002, almost 5 million Americans were diagnosed with heart failure. \(^1\), \(^3\)

• One study showed that during the past 20 years, heart failure has not declined, but survival after being diagnosed has increased. \(^1\), \(^3\)

• From 1999 to 2002, almost 5 million Americans were diagnosed with heart failure, and deaths from heart failure increased 35.3 percent. \(^1\), \(^3\)

• In 2005, the estimated cost of heart failure in the United States was $27.9 billion. \(^1\), \(^3\)

Results

• In 2006, Joint Commission-accredited hospitals reported steady improvement over the course of the study in all of the heart failure measures, with the most significant improvement in providing both discharge instructions and smoking cessation advice to heart failure patients.

• The best rates of performance were for:
  – Providing left ventricular function (LVF) assessment improved from 81.5 percent in 2002, to 84.5 percent in 2003, to 87.5 percent in 2004, to 90.9\(^*\) percent in 2005, to 93.4 percent in 2006.
  – Providing smoking cessation advice improved from 42.2 percent in 2002, to 56.8 percent in 2003, to 69.6\(^*\) percent in 2004, to 83.9\(^*\) percent in 2005, to 92.1 percent in 2006.
  – Providing ACE inhibitor or ARB at discharge improved from 74.2 percent in 2002, to 75.8 percent in 2003, to 76.3 percent in 2004, to 83.0 percent in 2005, to 85.6 percent in 2006.
  – Providing discharge instructions improved significantly since 2005, up 11.1 percent to 70.3 percent.

What one should know about the data

• These data measure specific “processes” of care for heart failure. In this instance, the study counts the number of patients receiving the recommended care for heart failure.

• While improvement sometimes is less than 1 percentage point, these are statistically significant improvements because of the larger number of hospitals that reported these data during the time period covered in this graph.

\(^*\) This number varies from that in the previous report due to later additional data submissions and/or corrections to previously submitted data.
PNEUMONIA CARE PERFORMANCE DETAIL

What this information tells us

These data illustrate the “composite” measure of how consistently hospitals provided evidence-based care for pneumonia in 2006. The number of hospitals (left axis) is shown in relation to the composite measure rate (bottom axis) for the eight evidence-based pneumonia treatments or measures evaluated in this report. Data represented by this illustration were reported by 3,054 total hospitals.

Results

During 2006, the national average for providing the eight evidence-based pneumonia treatments or measures evaluated in this report was 87.3 percent, an improvement of 15.0 percentage points from 2002, when The Joint Commission began tracking performance on pneumonia care measures. The bars on the chart show the approximate number of hospitals achieving varying composite measure rates, which are plotted on a scale of 40 to 100 percent in 2.5 percent intervals. For example, the highest bars show that most hospitals achieved composite measure rates between roughly 80 and 95 percent in 2006.

What one should know about the data

Hospitals were required to have a minimum of 30 patients in order to report these data. That was the minimum sample size required for a hospital to receive a rating on Quality Check.
**What this information tells us**

These data report the percentage of pneumonia patients who had the amount of oxygen in their bloodstream measured.

**What’s important to know about pneumonia and oxygenation assessment**

Giving oxygen has been shown to improve survival rates for pneumonia patients with low levels of oxygen.25, 26

**Results**

- In 2006, Joint Commission-accredited hospitals achieved **national average performance of 99.6 percent** in measuring blood oxygen level in pneumonia patients—**an improvement of 0.3 percentage points** from 2005, of 1 percentage point from 2004, of 2.4 percentage points from 2003, and of 4.6 percentage points from 2002.
- Performance rates among states ranged from 98.9 to 100 percent.
- Of all the measures covered in this report, hospitals showed the best performance on this particular treatment. This measure also showed the least variability, meaning it was provided more consistently at all Joint Commission accredited hospitals.
What one should know about the data

• Some pneumonia patients had the oxygen in their bloodstream measured but were excluded from these data for one or more of the following reasons:

  – The patient was not diagnosed with pneumonia at the time of admission to the hospital.

  – The patient’s chest X-ray or CT scan was not positive for pneumonia anytime during the patient’s stay in the hospital or within 24 hours before the patient arrived at the hospital.

  – The patient was younger than 18 years of age.

  – The patient was transferred from another acute care or critical access hospital, including another emergency department.

  – The patient received comfort care only.
What this information tells us

These data report the percentage of pneumonia patients ages 65 years and older who were screened and vaccinated to prevent pneumonia.

What’s important to know about pneumonia screening and vaccination

• It’s important to give pneumonia vaccine because of the increasing resistance of pneumonia bacteria to antibiotics. 25

• Studies show that vaccination is up to 60 percent effective in preventing bacterial infection. 26, 27

• National guidelines recommend that pneumococcal vaccine be given to all patients age 65 or older and younger patients who have medical conditions associated with increased risk for pneumonia. Revaccination is recommended after 5 to 7 years. 25, 28
Results

• In 2006, Joint Commission-accredited hospitals achieved national average performance of 75.8 percent in providing pneumococcal screening and vaccinating pneumonia patients—an improvement of 12.9* percentage points from 2005, of 27.0 percentage points from 2004, of 38.2 percentage points from 2003, and of 45.6 percentage points from 2002.

• Performance rates among states ranged from 55.5 to 91.0 percent. There has been significant improvement over time.

What one should know about the data

• Some pneumonia patients received pneumococcal screening and vaccination but were excluded from these data for one or more of the following reasons:
  – The patient was not diagnosed with pneumonia at the time of admission to the hospital.
  – The patient’s chest X-ray or CT scan was not positive for pneumonia anytime during the patient’s stay in the hospital or within 24 hours before the patient arrived at the hospital.
  – The patient was younger than 65 years of age.
  – The patient was transferred to another general or federal hospital.
  – The patient was discharged to hospice.
  – The patient left the hospital against medical advice.
  – The patient received comfort care only.
  – The patient died.

* This number varies from that in the previous report due to later additional data submissions and/or corrections to previously submitted data.
What this information tells us

These data report the percentage of pneumonia patients in the intensive care unit (ICU) who had a blood test to check for the presence of bacteria before they were given antibiotics.

What’s important to know about pneumonia and blood cultures

Pneumonia treatment guidelines recommend that blood tests be taken for all pneumonia patients to determine the most effective treatment.29

Results

• In 2006, Joint Commission-accredited hospitals achieved national average performance of **90.4 percent** in taking a blood test of pneumonia patients in the ICU before giving them antibiotics.

• Performance rates among states ranged from 82.2 to 95.3 percent, showing wide variability across the nation.
What one should know about the data

• Prior to 2006, this measure was called “blood tests before giving antibiotics.” By 2006, the measure was divided into two measures to enable performance measurement in two distinct settings of care, the intensive care unit (ICU) and emergency department (ED).

• Some pneumonia patients were given a blood test in the intensive care unit (ICU) before being given antibiotics but were excluded from these data for one or more of the following reasons:
  – The patient did not receive antibiotics or have a blood culture.
  – The patient was not diagnosed with pneumonia at the time of admission to the hospital.
  – The patient’s chest X-ray or CT scan was not positive for pneumonia anytime during the patient’s stay in the hospital or within 24 hours before the patient arrived at the hospital.
  – The patient was younger than 18 years of age.
  – The patient was transferred from another acute care or critical access hospital, including another emergency department.
  – The patient received comfort care only.
What this information tells us

These data report the percentage of pneumonia patients in the emergency department (ED) who had a blood test to check for the presence of bacteria before they were given antibiotics.

What’s important to know about pneumonia and blood cultures

Pneumonia treatment guidelines recommend that blood tests be taken for all pneumonia patients to determine the most effective treatment.29

Results

• In 2006, Joint Commission-accredited hospitals achieved national average performance of 90.1 percent in taking a blood test of pneumonia patients in the ED before giving them antibiotics.
• Performance rates among states ranged from 82.2 to 94.9 percent, showing wide variability across the nation.
What one should know about the data

• Prior to 2006, this measure was called “blood tests before giving antibiotics.” By 2006, the measure was divided into two measures to enable performance measurement in two distinct settings of care, the intensive care unit (ICU) and emergency department (ED).

• Some pneumonia patients were given a blood test in the emergency department (ED) before being given antibiotics but were excluded from these data for one or more of the following reasons:
  – The patient did not receive antibiotics or have a blood culture.
  – The patient was not diagnosed with pneumonia at the time of admission to the hospital.
  – The patient’s chest X-ray or CT scan was not positive for pneumonia anytime during the patient’s stay in the hospital or within 24 hours before the patient arrived at the hospital.
  – The patient was younger than 18 years of age.
  – The patient was transferred from another acute care or critical access hospital, including another emergency department.
  – The patient received comfort care only.
What this information tells us

These data report the percentage of pneumonia patients who were given advice or counseling about quitting smoking.

What's important to know about pneumonia and smoking cessation advice

• More than 25 percent of adult American men and 20 percent of adult American women are smokers.  
• Studies show that smokers are more likely to quit smoking if a doctor advises them to stop.
• One year after quitting smoking, a person's risk of heart disease decreases by 50 percent.
• National guidelines recommend smoking cessation counseling for pneumonia patients who smoke.
Results

• In 2006, Joint Commission-accredited hospitals achieved **national average performance of 89.4 percent** in advising pneumonia patients to quit smoking—**an improvement of 9.3** percentage points from 2005, of 23.9 percentage points from 2004, of 39.2 percentage points from 2003, and of 52.2 percentage points from 2002.

• Performance rates among states ranged from 70.9 to 95.9 percent, showing wide variability across the nation.

• Smoking cessation advice is the only measure provided for heart attack, heart failure and pneumonia care. Performance in providing smoking cessation advice to pneumonia and heart failure patients improved at a faster rate than advice provided to heart attack patients.

What one should know about the data

• Some pneumonia patients received smoking cessation advice but were excluded from these data for one or more of the following reasons:

  – The patient was not diagnosed with pneumonia at the time of their admission to the hospital.

  – The patient’s chest X-ray or CT scan was not positive for pneumonia anytime during the patient’s stay in the hospital or within 24 hours before the patient arrived at the hospital.

  – The patient was younger than 18 years of age.

  – The patient was transferred to another federal or general hospital.

  – The patient was discharged to hospice.

  – The patient left against medical advice.

  – The patient received comfort care only.

  – The patient died in the hospital.

* This number varies from that in the previous report due to later additional data submissions and/or corrections to previously submitted data.
What this information tells us

These data report the percentage of pneumonia patients who received an antibiotic within 4 hours of arriving at the hospital.

What’s important to know about pneumonia and antibiotics

Studies show that pneumonia patients have better survival rates if they receive antibiotics within 3 to 8 hours of arriving at the hospital. 28, 29, 30, 31

Results

• In 2006, Joint Commission-accredited hospitals achieved a national average performance of 79.0 percent in providing antibiotics to pneumonia patients within 4 hours of arrival at the hospital—an improvement of 4.5 percentage points from 2005, the first full year this measure was tracked.

• Performance rates among states ranged from 69.3 to 88.8 percent.
What one should know about the data

- By 2005, this measure changed from one where “time to antibiotic” was measured and recorded to one where “the number of patients receiving antibiotics within 4 hours of arrival” was measured and recorded.

- Some pneumonia patients received this treatment but were excluded from these data for one or more of the following reasons:
  - The patient received antibiotics within 24 hours prior to arriving at the hospital.
  - The patient did not receive antibiotics within 36 hours from the time of hospital arrival.
  - The patient was not diagnosed with pneumonia at the time of admission to the hospital.
  - The patient’s chest X-ray or CT scan was not positive for pneumonia anytime during the patient’s stay in the hospital or within 24 hours before the patient arrived at the hospital.
  - The patient was younger than 18 years of age.
  - The patient was transferred from another acute care or critical access hospital, including another emergency department.
  - The patient was involved in clinical trials.
  - The patient received comfort care only.
What this information tells us

These data report the percentage of pneumonia patients (those with a certain type of pneumonia called Community Acquired Pneumonia) in the intensive care unit (ICU) who started taking antibiotics within 24 hours of arriving at the hospital.

What’s important to know about Community Acquired Pneumonia and antibiotics

Studies show that pneumonia patients have better survival rates if they receive antibiotics within 3 to 8 hours of arriving at the hospital. 28, 29, 30, 31

Results

• In 2006, Joint Commission-accredited hospitals achieved a national average performance of 59.8 percent in starting ICU patients with Community Acquired Pneumonia on antibiotics within 24 hours of arrival at the hospital—an improvement of 9.6* percentage points from 2005, the first full year this measure was tracked.

• Performance rates among states ranged from 47.4 to 74.6 percent, showing wide variability across the nation.

* This number varies from that in the previous report due to later additional data submissions and/or corrections to previously submitted data.
What one should know about the data

- Some pneumonia patients received this treatment but were excluded from these data for one or more of the following reasons:
  - The patient did not receive antibiotics while in the hospital or within 36 hours after arriving at the hospital.
  - The patient was not diagnosed with pneumonia at the time of admission to the hospital.
  - The patient’s chest X-ray or CT scan was not positive for pneumonia anytime during the patient’s stay in the hospital or within 24 hours before the patient arrived at the hospital.
  - The patient had a type of pneumonia called Health Care Associated Pneumonia.
  - The patient’s immune system was already susceptible to infection.
  - The patient was not in the ICU.
  - The patient was younger than 18 years of age.
  - The patient was transferred from another acute care or critical access hospital, including another emergency department.
  - The patient was involved in clinical trials.
  - The patient received comfort care only.
What this information tells us

These data report the percentage of pneumonia patients (those with a certain kind of pneumonia called Community Acquired Pneumonia) who were not in the intensive care unit (ICU) and who started taking antibiotics within 24 hours of arriving at the hospital.

What’s important to know about Community Acquired Pneumonia and antibiotics

Studies show that pneumonia patients have better survival rates if they receive antibiotics within 3 to 8 hours of arriving at the hospital. 28, 29, 30, 31

Results

• In 2006, Joint Commission-accredited hospitals achieved a national average performance of 88.8 percent in starting patients with Community Acquired Pneumonia who were not in the ICU on antibiotics within 24 hours of arrival at the hospital—an improvement of 4.8* percentage points from 2005, the first full year this measure was tracked.

• Performance rates among states ranged from 83.7 to 93.3 percent.

* This number varies from that in the previous report due to later additional data submissions and/or corrections to previously submitted data.
What one should know about the data

• Some pneumonia patients received this treatment but were excluded from these data for one or more of the following reasons:

  – The patient did not receive antibiotics while in the hospital or within 36 hours after arriving at the hospital.
  – The patient was not diagnosed with pneumonia at the time of admission to the hospital.
  – The patient’s chest X-ray or CT scan was not positive for pneumonia anytime during the patient’s stay in the hospital or within 24 hours before the patient arrived at the hospital.
  – The patient had a type of pneumonia called Health Care Associated Pneumonia.
  – The patient’s immune system was already susceptible to infection.
  – The patient was in the ICU.
  – The patient was younger than 18 years of age.
  – The patient was transferred from another acute care or critical access hospital, including another emergency department.
  – The patient was involved in clinical trials.
  – The patient received comfort care only.
What this information tells us

These graphs show the national performance rates of Joint Commission-accredited hospitals for three pneumonia care measures evaluated over the course of four consecutive years (2002-2006) and for three more measures evaluated over two years (2005-2006).

What’s important to know about pneumonia

• Approximately 5 million cases of pneumonia occur annually.20

• Pneumonia is the cause of nearly 55 million days of restricted activity, 31.5 million bed days, and 1.3 million hospitalizations each year.21

• Inpatient treatment for pneumonia amounts to more than $7.5 billion annually.22
Results

• Joint Commission-accredited hospitals reported improvement during the course of the study for all of the pneumonia measures, with the most significant improvement in providing smoking cessation advice to pneumonia patients.

• The best rates of performance were for:
  – Providing smoking cessation advice improved from 37.2 percent in 2002, to 50.2 percent in 2003, to 65.5 percent in 2004, to 80.1* percent in 2005, to 89.4 percent in 2006.
  – Pneumococcal screening and vaccination improved from 30.2 percent in 2002, to 37.6 percent in 2003, to 48.8 percent in 2004, to 62.9* percent in 2005, to 75.8 percent in 2006.
  – Measuring oxygen in the bloodstream improved from 95.0 percent in 2002, to 97.2 percent in 2003, to 98.6 percent in 2004, to 99.3 percent in 2005, to 99.6 percent in 2006.

• While performance in providing smoking cessation advice and in providing pneumococcal screening and vaccination is improving, there is still room for further improvement. In 2006, 89.4 percent of hospitals nationwide were advising pneumonia patients to quit smoking compared to 80.1* percent in 2005. In 2006, 75.8 percent of hospitals nationwide were providing pneumococcal screening and treatment to pneumonia patients, up from 62.9* percent in 2005.

What one should know about the data

• While improvement sometimes is less than 1 percentage point, these are statistically significant improvements because of the larger number of hospitals that reported these data during the time period covered in these graphs.

* This number varies from that in the previous report due to later additional data submissions and/or corrections to previously submitted data.
Surgical Care† Performance Detail

What this information tells us

These data report the percentage of surgical patients at Joint Commission-accredited hospitals throughout the nation who received an antibiotic within one hour before the first surgical cut. Infection is lowest when patients receive antibiotics to prevent infection within one hour before the skin is surgically cut. This measure is one of two surgical care measures. Each measure reports the rates on seven specific surgical procedures, as well as the overall measure rate. The box plots show the 25th, 50th and 75th percentile and the range of data (the “whiskers”) for each surgical procedure and for this measure overall. Note: Not every surgery requires antibiotics and this measure reports on those selected surgeries where evidence or experts have identified that antibiotics would be helpful.

What’s important to know about surgical infection prevention

- In about 25 percent to 50 percent of operations, overuse, underuse, improper timing, and inappropriate use of antibiotics occur.34

† In 2006, the Surgical Infection Prevention Project was renamed the Surgical Care Improvement Project to encompass more areas of surgical care.

Key to abbreviations: CABG: Coronary artery bypass graft surgery. See Glossary for definitions.

Improving America's Hospitals: The Joint Commission's Annual Report on Quality and Safety
• Overuse, underuse, inappropriate use, and improper timing of antibiotics could result in a surgical site infection, an increased risk of antibiotic resistance, an antibiotic shortage, and increased health care costs.

• Based on scientific evidence, health care personnel can take specific steps to prevent surgical site infections for some operations, including:
  – Selecting the antibiotics recommended by the Surgical Care Improvement Project specific to the type of surgery the patient is having.
  – Starting the preventive antibiotic within one hour of the first surgical skin cut (except for vancomycin or fluoroquinolone antibiotics, which should be given within two hours before the first surgical skin cut).

• Ways that the patient can prevent or minimize surgical infections are:
  – Stop smoking. Patients who smoke have significantly higher rates of surgical infections.
  – Wash your hands before touching your surgical site or any other open site, and ask that others do the same—including health care professionals. Hand washing is the single most important means of preventing infections.

Results

• In 2006, 881 Joint Commission-accredited hospitals reported data for this measure and achieved overall national average performance of 86.7 percent in providing surgical patients with antibiotics within one hour before the first surgical cut—an improvement of 4.9 percentage points from 2005, the first full year this measure set was tracked.

• Performance rates among the different types of surgical procedures ranged from 78.0 to 90.4 percent.
  – For coronary artery bypass graft (CABG) surgery, of the 282 hospitals reporting this data, 87.6 percent provided antibiotics within one hour before the first surgical cut—an improvement of 2.4 percentage points from 2005. Performance rates among states for this measure ranged from 61.8 to 100 percent.
  – For cardiac surgery (other than CABG), of the 275 hospitals reporting this data, 87.1 percent provided antibiotics within one hour before the first surgical cut—an improvement of 3.3 percentage points from 2005. Performance rates among states for this measure ranged from 50.0 to 100 percent.
  – For colon surgery, of the 828 hospitals reporting this data, 78.0 percent provided antibiotics within one hour before the first surgical cut—an improvement of 5.8* percentage points from 2005. Performance rates among states for this measure ranged from 59.3 to 100 percent.
  – For hip joint replacement surgery, of the 783 hospitals reporting this data, 86.8 percent provided antibiotics within one hour before the first surgical cut—an improvement of 5.5* percentage points from 2005. Performance rates among states for this measure ranged from 20.0 to 100 percent.
– For hysterectomy surgery, of the 802 hospitals reporting this data, 87.0 percent provided antibiotics within one hour before the first surgical cut—an improvement of 4.7 percentage points from 2005. Performance rates among states for this measure ranged from 67.2 to 96.6 percent.

– For knee joint replacement surgery, of the 779 hospitals reporting this data, 90.4 percent provided antibiotics within one hour before the first surgical cut—an improvement of 5.3* percentage points from 2005. Performance rates among states for this measure ranged from 50.0 to 100 percent.

– For vascular surgery, of the 563 hospitals reporting this data, 81.1 percent provided antibiotics within one hour before the first surgical cut—an improvement of 5.9 percentage points from 2005. Performance rates among states for this measure ranged from 50.0 to 100 percent.

What one should know about the data

• The smaller number of hospitals reporting on the surgical care measures may be a result of the majority of hospitals selecting the acute myocardial infarction, heart failure, and pneumonia measure sets to meet both Joint Commission requirements and receive a financial incentive from Medicare. Hospitals receiving reimbursement from Medicare had a financial incentive in 2006 to submit data on 21 measures from the acute myocardial infarction, heart failure and pneumonia measure sets, or receive a lower payment if not reported. However, as requirements and incentives change, it is anticipated that a larger number of hospital will select this measure set.

• Some surgical patients received an antibiotic within one hour before the first surgical cut but were excluded from these data for one or more of the following reasons:

  – The patient was taking antibiotics within 24 hours before arriving at the hospital or having surgery (except colon surgery patients taking oral antibiotics as directed by their doctor).

  – The patient was taking antibiotics more than 24 hours before surgery (except colon surgery patients taking oral antibiotics as directed by their doctor).

  – The patient was having colon surgery and was already taking oral antibiotics as directed by his or her doctor, and the patient received no other antibiotics during his or her hospital stay.

  – The patient had another procedure that required anesthesia, and the anesthesia was administered within 3 days (4 days for CABG and other cardiac surgery) before or after the surgery.

  – The patient’s surgery occurred before the date of admission.

  – The patient already had an infection or infectious disease.

  – The patient was younger than 18 years of age.

* This number varies from that in the previous report due to later additional data submissions and/or corrections to previously submitted data.
Surgical Care: National Rates by Year
Prophylactic Antibiotic Received Within One Hour Prior to Surgical Incision

See Glossary for definitions.
What this information tells us

These graphs show the national performance, or compliance, rates of Joint Commission accredited hospitals from 2005 to 2006 for the surgical care measure on providing antibiotics within one hour before surgery. The overall rate is shown as well as rates for the specific types of surgery.

What’s important to know about surgical infection prevention

• Surgical site infections are not contagious and cannot be transferred from one person to another. However, these infections can have devastating effects on the patient and their families.

• Surgical site infections are the second most common hospital-acquired infections in the United States. 33

• Of 40 million operations performed in the United States annually, 0.8 million to 2 million are associated with surgical site infections. 34

• Surgical site infections prolong hospital stays by an average of 7.5 days. 34

• Surgical site infections cost the nation between $130 million to $845 million each year. 34

• It is estimated that 40 percent to 60 percent of surgical site infections could be prevented. 34

• In about 25 percent to 50 percent of operations, overuse, underuse, improper timing, and inappropriate use of antibiotics occur. 34

Results

• Joint Commission-accredited hospitals reported improvement during the course of the study for all of the surgical care measure related to providing antibiotics within one hour before surgery. The most significant improvement was for knee joint replacement surgery.

• The best rates of performance for receiving antibiotics within one hour before surgery were for:
  – Knee joint replacement surgery improved from 85.1* percent in 2005 to 90.4 percent in 2006.
  – CABG surgery improved from 85.2 percent in 2005 to 87.6 percent in 2006.
  – Cardiac surgery improved from 83.8 in 2005 to 87.1 in 2006.

• The greatest need for improvement is for receiving antibiotics within one hour before colon surgery with 78.0 percent national performance.

What one should know about the data

While improvement sometimes is less than 1 percentage point, these are statistically significant improvements because of the larger number of hospitals that reported these data during the time period covered in these graphs.

* This number varies from that in the previous report due to later additional data submissions and/or corrections to previously submitted data.
What this information tells us

These data report the percentage of surgical patients at Joint Commission-accredited hospitals throughout the nation whose antibiotic was stopped within 24 hours after having surgery (or within 48 hours of having CABG or other cardiac surgery). Giving medicine that prevents infection for more than 24 hours after the end of surgery is not helpful unless there is a specific reason (for example, fever or other signs of infection). This measure is one of two surgical care measures. Each measure reports the rates on seven specific surgical procedures, as well as the overall measure rate. The box plots show the 25th, 50th and 75th percentile and the range of data (the “whiskers”) for each surgical procedure and for this measure overall. Note: Not every surgery requires antibiotics and this measure reports on those selected surgeries where evidence or experts have identified that antibiotics would be helpful.
What’s important to know about surgical infection prevention

- In about 25 percent to 50 percent of operations, overuse, underuse, improper timing, and inappropriate use of antibiotics occur.\textsuperscript{34}

- Overuse, underuse, inappropriate use, and improper timing of antibiotics could result in a surgical site infection, an increased risk of antibiotic resistance, an antibiotic shortage, and increased health care costs.

- Based on scientific evidence, \textit{health care personnel} can take specific steps to prevent surgical site infections for some operations, including:
  - Selecting the antibiotics recommended by the Surgical Infection Prevention Project\textsuperscript{33} specific to the type of surgery the patient is having.
  - Stopping the preventive antibiotic within 24 hours after the surgery (48 hours for CABG or other cardiac surgery).

- Ways that \textit{the patient} can prevent or minimize surgical infections are:
  - Stop smoking. Patients who smoke have significantly higher rates of surgical infections.
  - Wash your hands before touching your surgical site or any other open site, and ask that others do the same—including health care professionals. Hand washing is the single most important means of preventing infections.

Results

- In 2006, 880 Joint Commission-accredited hospitals reported data for this measure and achieved overall \textbf{national average performance of 78.9 percent} in stopping antibiotics within 24 hours after surgery—\textbf{an improvement of 5.4 percentage points} from 2005, the first full year this measure set was tracked.

- Performance rates among the different types of surgical procedures ranged from 65.2 to 89.1 percent.
  - For coronary artery bypass graft (CABG) surgery, of the 282 hospitals reporting this data, 86.8 percent stopped antibiotics within 24 hours after surgery—\textbf{an improvement of 16.8 percentage points} from 2005. Performance rates among states for this measure ranged from 42.1 to 100 percent.
  - For cardiac surgery (other than CABG), of the 275 hospitals reporting this data, 85.7 percent stopped antibiotics within 24 hours after surgery—\textbf{an improvement of 22.7 percentage points} from 2005. Performance rates among states for this measure ranged from 50.0 to 100 percent.
  - For colon surgery, of the 826 hospitals reporting this data, 65.2 percent stopped antibiotics within 24 hours after surgery—\textbf{an improvement of 3.7 percentage points} from 2005. Performance rates among states for this measure ranged from 16.9 to 90.1 percent.
  - For hip joint replacement surgery, of the 782 hospitals reporting this data, 74.7 percent stopped antibiotics within 24 hours after surgery—\textbf{an improvement of 5.7 percentage points} from 2005. Performance rates among states for this measure ranged from 22.2 to 100 percent.
– For hysterectomy surgery, of the 801 hospitals reporting this data, 89.1 percent stopped antibiotics within 24 hours after surgery—an improvement of 1.1 percentage points from 2005. Performance rates among states for this measure ranged from 67.9 to 100 percent.

– For knee joint replacement surgery, of the 779 hospitals reporting this data, 76.0 percent stopped antibiotics within 24 hours after surgery—an improvement of 6.7 percentage points from 2005. Performance rates among states for this measure ranged from 37.8 to 100 percent.

– For vascular surgery, of the 557 hospitals reporting this data, 67.2 percent stopped antibiotics within 24 hours after surgery—an improvement of 1.8 percentage points from 2005. Performance rates among states for this measure ranged from 25.0 to 100 percent.

What one should know about the data

• The smaller number of hospitals reporting on the surgical care measures may be a result of the majority of hospitals selecting the acute myocardial infarction, heart failure, and pneumonia measure sets to meet both Joint Commission requirements and receive a financial incentive from Medicare. Hospitals receiving reimbursement from Medicare had a financial incentive in 2006 to submit data on 21 measures from the acute myocardial infarction, heart failure and pneumonia measure sets, or receive a lower payment if not reported. However, as requirements and incentives change, it is anticipated that a larger number of hospitals will select this measure set.

• Some surgical patients received an antibiotic within one hour before the first surgical cut but were excluded from these data for one or more of the following reasons:

  – The patient was taking antibiotics within 24 hours before arriving at the hospital or having surgery (except colon surgery patients taking oral antibiotics as directed by their doctor).

  – The patient was taking antibiotics more than 24 hours before surgery (except colon surgery patients taking oral antibiotics as directed by their doctor).

  – The patient was diagnosed and treated for infection within two days after surgery (three days for CABG and other cardiac surgery).

  – The patient did not receive any antibiotics during his or her hospital stay.

  – The patient had another procedure that required anesthesia, and the anesthesia was administered within 3 days (4 days for CABG and other cardiac surgery) before or after the surgery.

  – The patient’s surgery occurred before the date of admission.

  – The patient already had an infection or infectious disease.

  – The patient was younger than 18 years of age.
Surgical Care: National Rates by Year
Prophylactic Antibiotic Discontinued Within 24 Hours After Surgical End Time

See Glossary for definitions.
What this information tells us

These graphs show the national performance, or compliance, rates of Joint Commission accredited hospitals from 2005 to 2006 for the surgical care measure on stopping antibiotics within 24 hours after surgery. The overall rate is shown as well as rates for the specific types of surgery.

What’s important to know about surgical infection prevention

- Surgical site infections are not contagious and cannot be transferred from one person to another. However, these infections can have devastating effects on the patient and their families.

- Surgical site infections are the second most common hospital-acquired infections in the United States.³³

- Of 40 million operations performed in the United States annually, 0.8 million to 2 million are associated with surgical site infections.³⁴

- Surgical site infections prolong hospital stays by an average of 7.5 days.³⁴

- Surgical site infections cost the nation between $130 million to $845 million each year.³⁴

- It is estimated that 40 percent to 60 percent of surgical site infections could be prevented.³⁴

- In about 25 percent to 50 percent of operations, overuse, underuse, improper timing, and inappropriate use of antibiotics occur.³⁴

Results

- Joint Commission-accredited hospitals reported improvement during the course of the study for all of the surgical care measure related to stopping antibiotics within 24 hours after the end of surgery. The most significant improvement was for hysterectomy surgery.

- The best rates of performance for stopping antibiotics within 24 hours after surgery were for:
  - Hysterectomy surgery improved from 88.0 percent in 2005 to 89.1 percent in 2006.
  - CABG surgery improved from 70.0 percent in 2005 to 86.8 percent in 2006.
  - Cardiac surgery improved from 63.0 in 2005 to 85.7 in 2006.

- The greatest need for improvement is for stopping antibiotics within 24 hours after colon surgery with 65.2 percent national performance.

What one should know about the data

While improvement sometimes is less than 1 percentage point, these are statistically significant improvements because of the larger number of hospitals that reported these data during the time period covered in these graphs.
National Patient Safety Goal 1: Improve the accuracy of patient identification.

Requirement 1A: Use at least two patient identifiers (neither to be the patient’s room number) whenever administering medications or blood products; taking blood samples and other specimens for clinical testing or providing any other treatments or procedures.

What this information tells us

These data report the percentage of hospitals complying with the requirement of using at least two patient identifiers (neither to be the patient’s room number) whenever administering medications or blood products; taking blood samples and other specimens for clinical testing or providing any other treatments or procedures.

Result

- In 2006, Joint Commission-accredited hospitals achieved national average performance of 91.9 percent in using at least two patient identifiers.

What one should know about the data

- 1,429 hospitals underwent on-site surveys during 2006.
- North Dakota did not have any surveys in 2006.
National Patient Safety Goal 1: Improve the accuracy of patient identification.

Requirement 1B: Prior to the start of any surgical or invasive procedure, conduct a final verification process, such as a “time out,” to confirm the correct patient, procedure and site, using active—not passive—communication techniques.

What this information tells us

These data report the percentage of hospitals complying with the requirement of, prior to the start of any surgical or invasive procedure, conducting a final verification process, such as a “time out,” to confirm the correct patient, procedure and site, using active—not passive—communication techniques.

Result

• In 2006, Joint Commission-accredited hospitals achieved **national average performance of 74.2 percent** in conducting a final verification or “time-out” process prior to surgery.

What one should know about the data

• 1,429 hospitals underwent on-site surveys during 2006.
• North Dakota did not have any surveys in 2006.

*Note: This requirement is surveyed under The Joint Commission's Universal Protocol for Preventing Wrong Site, Wrong Procedure, Wrong Person Surgery™.*
National Patient Safety Goal 2: Improve the effectiveness of communication among caregivers.

Requirement 2A: For verbal or telephone orders or for telephonic reporting of critical test results, verify the complete order or test result by having the person receiving the order or test result “read-back” the complete order or test result.

What this information tells us

These data report the percentage of hospitals complying with the requirement of, for verbal or telephone orders or for telephonic reporting of critical test results, verifying the complete order or test result by having the person receiving the order or test result “read-back” the complete order or test result.

Result

• In 2006, Joint Commission-accredited hospitals achieved national average performance of 84.3 percent in verifying by reading back the complete order or test result.

What one should know about the data

• 1,429 hospitals underwent on-site surveys during 2006.
• North Dakota did not have any surveys in 2006.
National Patient Safety Goal 2: Improve the effectiveness of communication among caregivers.

Requirement 2B: Standardize a list of abbreviations, acronyms and symbols that are not to be used throughout the organization.

What this information tells us
These data report the percentage of hospitals complying with the requirement of standardizing the abbreviations, acronyms and symbols not to be used throughout the organization.

Result
• In 2006, Joint Commission-accredited hospitals achieved national average performance of 63.1 percent in standardizing “do not use” abbreviations, acronyms and symbols.

What one should know about the data
• 1,429 hospitals underwent on-site surveys during 2006.
• North Dakota did not have any surveys in 2006.
National Patient Safety Goal 2: Improve the effectiveness of communication among caregivers.

Requirement 2C: Measure, assess and, if appropriate, take action to improve the timeliness of reporting, and the timeliness of receipt by the responsible licensed caregiver, of critical test results and values.

What this information tells us

These data report the percentage of hospitals complying with the requirement of measuring, assessing and, if appropriate, taking action to improve the timeliness of reporting, and the timeliness of receipt by the responsible licensed caregiver, of critical test results and values.

Result

• In 2006, Joint Commission-accredited hospitals achieved national average performance of 73.1 percent in improving the timely reporting of critical test results and values.

What one should know about the data

• 1,429 hospitals underwent on-site surveys during 2006.
• North Dakota did not have any surveys in 2006.
National Patient Safety Goal 2: Improve the effectiveness of communication among caregivers.

Requirement 2E: Implement a standardized approach to “hand off” communications, including an opportunity to ask and respond to questions.

What this information tells us

These data report the percentage of hospitals complying with the requirement to implement a standardized approach to “hand off” communications, including an opportunity to ask and respond to questions.

Result

• In 2006, Joint Commission-accredited hospitals achieved national average performance of 93.9 percent in improving the timely reporting of critical test results and values.

What one should know about the data

• 1,429 hospitals underwent on-site surveys during 2006.
• North Dakota did not have any surveys in 2006.
National Patient Safety Goal 3: Improve the safety of using medications.

Requirement 3B: Standardize and limit the number of drug concentrations available in the organization.

What this information tells us

These data report the percentage of hospitals complying with the requirement of standardizing and limiting the number of drug concentrations available in the organization.

Result

• In 2006, Joint Commission-accredited hospitals achieved national average performance of 98.3 percent in standardizing and limiting drug concentrations.

What one should know about the data

• 1,429 hospitals underwent on-site surveys during 2006.
• North Dakota did not have any surveys in 2006.
National Patient Safety Goal 3: Improve the safety of using medications.

Requirement 3C: Identify and, at a minimum, annually review a list of look-alike/sound-alike drugs used in the organization, and take action to prevent errors involving the interchange of these drugs.

What this information tells us

These data report the percentage of hospitals complying with the requirement of identifying and, at a minimum, annually reviewing a list of look-alike/sound-alike drugs used in the organization, and taking action to prevent errors involving the interchange of these drugs.

Result

• In 2006, Joint Commission-accredited hospitals achieved national average performance of 92.6 percent in identifying and reviewing a list of look-alike/sound-alike drugs and taking action to prevent errors involving these drugs.

What one should know about the data

• 1,429 hospitals underwent on-site surveys during 2006.
• North Dakota did not have any surveys in 2006.
National Patient Safety Goal 3: Improve the safety of using medications.

Requirement 3D: Label all medications, medication containers (e.g., syringes, medicine cups, basins), or other solutions on and off the sterile field in perioperative and other procedural settings.

What this information tells us

These data report the percentage of hospitals complying with the requirement to label all medications, medication containers (for example, syringes, medicine cups, basins), or other solutions on and off the sterile field in perioperative and other procedural settings.

Result

• In 2006, Joint Commission-accredited hospitals achieved national average performance of 91.1 percent in labeling all medications, medication containers (e.g., syringes, medicine cups, basins), or other solutions on and off the sterile field in perioperative and other procedural settings.

What one should know about the data

• 1,429 hospitals underwent on-site surveys during 2006.
• North Dakota did not have any surveys in 2006.

Requirement 4A: Create and use a preoperative verification process, such as a checklist, to confirm that appropriate documents (e.g., medical records, imaging studies) are available.

What this information tells us

These data report the percentage of hospitals complying with the requirement of creating and using a preoperative verification process to confirm the availability of appropriate documents.

Result

• In 2006, Joint Commission-accredited hospitals achieved national average performance of **97.1 percent** in creating and using a preoperative verification process to confirm the availability of appropriate documents.

What one should know about the data

• 1,429 hospitals underwent on-site surveys during 2006.

• North Dakota did not have any surveys in 2006.

Note: This requirement is surveyed under The Joint Commission’s Universal Protocol for Preventing Wrong Site, Wrong Procedure, Wrong Person Surgery™.

Requirement 4B: Implement a process to mark the surgical site and involve the patient in the marking process.

What this information tells us

These data report the percentage of hospitals complying with the requirement of implementing a process to mark the surgical site and involving the patient in this process.

Result

• In 2006, Joint Commission-accredited hospitals achieved national average performance of 93.4 percent in implementing a process of surgical site marking and involving the patient in this process.

What one should know about the data

• 1,429 hospitals underwent on-site surveys during 2006.
• North Dakota did not have any surveys in 2006.

Note: This requirement is surveyed under The Joint Commission’s Universal Protocol for Preventing Wrong Site, Wrong Procedure, Wrong Person Surgery™.
National Patient Safety Goal 7: Reduce the risk of health care-associated infections.

Requirement 7A: Comply with current Centers for Disease Control and Prevention (CDC) hand hygiene guidelines.

What this information tells us

These data report the percentage of hospitals complying with current Centers for Disease Control and Prevention (CDC) hand hygiene guidelines.

Result

• In 2006, Joint Commission-accredited hospitals achieved national average performance of 91.2 percent in complying with current CDC hand hygiene guidelines.

What one should know about the data

• 1,429 hospitals underwent on-site surveys during 2006.
• North Dakota did not have any surveys in 2006.
National Patient Safety Goal 7: Reduce the risk of health care-associated infections.

Requirement 7B: Manage as sentinel events all identified cases of unanticipated death or major permanent loss of function associated with a health care-associated infection.

What this information tells us

These data report the percentage of hospitals complying with the requirement of managing as sentinel events all identified cases of unanticipated death or major permanent loss of function associated with a health care-acquired infection.

Result

• In 2006, Joint Commission-accredited hospitals achieved national average performance of 99.9 percent in managing as sentinel events all cases of unanticipated death or permanent function loss associated with health care-acquired function.

What one should know about the data

• 1,429 hospitals underwent on-site surveys during 2006.

• North Dakota did not have any surveys in 2006.
National Patient Safety Goal 8: Accurately and completely reconcile medications across the continuum of care.

Requirement 8A: Implement a process for obtaining and documenting a complete list of the patient’s current medications upon the patient’s admission to the organization and with the involvement of the patient. This process includes a comparison of the medications the organization provides to those on the list.

What this information tells us

These data report the percentage of hospitals complying with the requirement of implementing a process for obtaining and documenting a complete list of the patient’s current medications upon the patient’s admission to the organization and with the involvement of the patient. This process includes a comparison of the medications the organization provides to those on the list.

Result

• In 2006, Joint Commission-accredited hospitals achieved national average performance of 66.1 percent in developing a process for obtaining and documenting a complete list of a patient’s medications with the involvement of the patient.

What one should know about the data

• 1,429 hospitals underwent on-site surveys during 2006.
• North Dakota did not have any surveys in 2006.
National Patient Safety Goal 8: Accurately and completely reconcile medications across the continuum of care.

Requirement 8B: A complete list of the patient’s medications is communicated to the next provider of service when it refers or transfers a patient to another setting, service, practitioner or level of care within or outside the organization.

What this information tells us

These data report the percentage of hospitals complying with the requirement of communicating a complete list of the patient’s medications to the next provider of service when a patient is referred or transferred to another setting, service, practitioner or level of care within or outside the organization.

Result

• In 2006, Joint Commission-accredited hospitals achieved national average performance of 72.5 percent in communicating a complete list of patient medications to the next provider of service.

What one should know about the data

• 1,429 hospitals underwent on-site surveys during 2006.
• North Dakota did not have any surveys in 2006.
National Patient Safety Goal 9: Reduce the risk of patient harm resulting from falls.

Requirement 9B: Implement a fall reduction program and evaluate the effectiveness of the program.

What this information tells us

These data report the percentage of hospitals complying with the requirement to implement a fall reduction program and evaluate the effectiveness of the program.

Result

• In 2006, Joint Commission-accredited hospital achieved **national average performance of 93.5 percent** of assessing and periodically reassessing each patient’s risk for falling.

What one should know about the data

• 1,429 hospitals underwent on-site surveys during 2006.
• North Dakota did not have any surveys in 2006.
Glossary and References
GLOSSARY

ACE Inhibitors or ACEI. ACE stands for “angiotensin converting enzyme.” ACE inhibitors are medicines that are used to treat heart failure and high blood pressure. 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.

AMI – Acute Myocardial Infarction. The medical term for “heart attack.” Acute myocardial infarction results from a blockage in one or more of the blood vessels leading to the heart. Damage to the heart muscle results, due to the lack of blood flow.

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.

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.

At Arrival. The time period lasting from 24 hours before to 24 hours after a patient arrives at a hospital.

At Discharge. The time during which a patient is preparing to leave the hospital. At discharge, patients often receive information and advice about medicines, diet, activities and signs to watch for to prevent further hospitalization.

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 myocardial infarction (heart attack) and to relieve angina.

Composite measure. A measure that combines the results of all process measures within a set into a single rating.

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.
**Heart failure.** A condition characterized by signs and symptoms resulting from disturbances in cardiac output or from increased venous pressure, including fatigue, shortness of breath, or leg swelling.

**LVAD.** LVAD stands for Left Ventricular Assist Device – a device that is used to aid the pumping action of a weakened heart ventricle.

**LVF assessment.** An in-depth evaluation of heart muscle function that helps determine the correct treatment for heart failure. LVF stands for “left ventricular function.” An LVF 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.

**Joint Commission National Patient Safety Goals.** A series of specified actions that accredited organizations are expected to take in order to prevent medical errors.

**National Quality Improvement Goals.** Standardized performance measures that can be applied across accredited hospitals.

**Oxygenation assessment.** A test measuring the amount of oxygen in a patient’s bloodstream.

**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).

**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 screening and vaccination.** A vaccination and a series of tests that help to prevent pneumonia.

**Surgical Care Improvement Project (SCIP).** The goal of this project is to reduce the incidence of surgical complications with a focus on appropriate use of: antibiotics to prevent infection; beta-blockers to prevent cardiovascular complications; and prophylaxis to prevent venous thromboembolism (VTE).

**Surgical Infection Prevention Care.** The use of indicated antibiotics to prevent infection during surgery. Infection is lowest when patients receive antibiotics to prevent infection within one hour before the skin is surgically cut and when antibiotics are stopped within 24 hours after surgery.
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