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# Hospital Performance Measures Instruction Manual



**Version 7.0**

Ohio Department of Health (ODH)

Division of Quality Assurance

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## Background

In November of 2006, the Ohio General Assembly passed House Bill 197 (HB 197) which established new expanded data reporting requirements for hospitals. The purpose of this reporting is to provide consumers with the ability to view and compare Ohio hospitals' performance measures. On January 1, 2010 the website "Ohio Hospital Compare" <http://ohiohospitalcompare.ohio.gov/> went live to the public. Presently, you can navigate to the website by clicking on this link <http://publicapps.odh.ohio.gov/facilityinformation/>. The full list of measures required to be reported to the Ohio Department of Health (ODH) can be found in this document. These measures were developed and/or endorsed by the Centers for Medicare and Medicaid Services (CMS), The Joint Commission (TJC), National Quality Forum (NQF), Agency for Healthcare Research and Quality (AHRQ), and the Centers for Disease Control and Prevention (CDC) - National Healthcare Safety Network (NHSN). Rules 3701-14-02 through 3701-14-04 that apply to hospital performance measure reporting can be found on the ODH website at <http://www.odh.ohio.gov/rules/odhrules.aspx>. Section 3727.33 of the Ohio Revised Code (ORC) can also be referenced for statutory mandates.

The purpose of this manual is to provide hospitals with details regarding data reporting deadlines, timeframes and measure specifications.

For the purposes of reporting, "hospital" means an institution classified and registered as a hospital under the ORC section 3701.07. Hospitals that are Medicare-certified as long term acute care hospitals (LTACs) and governmental hospitals are excluded from reporting.

Hospitals are responsible for submitting performance data to ODH twice annually by April 1<sup>st</sup> and October 1<sup>st</sup> of each year. Any hospital that fails to submit data by the April 1<sup>st</sup> or October 1<sup>st</sup> deadline will be listed as "Hospital failed to submit" on Ohio Hospital Compare.

**If you have any questions or need assistance concerning the hospital performance measures, please contact Michelle Gallant at the telephone number or email address provided below.**

**Michelle Gallant**

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## General Data Reporting Information

### Required data reporting dates for all Ohio hospitals

Data should be reported to ODH by April 1 and October 1 each year. You should report the previous July through June for every April reporting period (i.e., report July 1, 2011 through June 30, 2012 by April 1, 2013) and the previous calendar year for each October reporting period (i.e., report calendar year 2012 by October 1, 2013). Once you have reported a full 12 months (4 quarters) of data, you will only need to submit 6 months' worth of data each subsequent reporting period. While the previous 6 months of data will be pre-populated in the system, this data *can* be edited during the *current* reporting period.

### Logging into the Hospital Measure Reporting application

To submit your data via the secure Hospital Measure Reporting application, go to the ODH application gateway at <https://odhgateway.odh.ohio.gov/singlesignon>. Log into the website using your ODH supplied username and password. Your username will be your first initial and last name (i.e., MSmith) or your first and last name separated by a period (i.e., Mary.Smith). Once you are logged in, select "Hospital Measure Reporting", then "Submit Performance Data" and select the hospital you're reporting for.

### Identification information

On the "Identification" page, make any changes necessary to your hospital's website address and "Contact 1" and "Contact 2" information. Click "Save" upon completion. You **must click "Save"** on this page **even if you do not make any changes**. You will know the page saved successfully without error when you see a **green checkmark** beside the "Identification" page name located on the left-hand side of the screen. As a reminder, please do not include "http://" as part of your hospital's website address. Doing so will prevent the consumer from being linked to your hospital's website from Ohio Hospital Compare. Also, if you want your "Hospital Name" to appear differently on Ohio Hospital Compare, please contact Michelle Gallant to make the change.

### Pre-populated data

When you enter the Hospital Measure Reporting application, you may see that **Qtr 3 and Qtr 4 data for 2012** has been pre-populated for you. This data was pre-populated from data the Ohio Hospital Association (OHA) was able to obtain from The Joint Commission and Centers for Medicare & Medicaid Services' public website. You will also see that the perinatal/pregnancy data is pre-populated for you. This data is obtained from the ODH birth records residing in the Integrated Public Health Information System (IPHIS). **Even though this data is populated, it is your responsibility to check the numbers for accuracy.** If you find the data is inaccurate, simply enter the correct numbers. After you've entered your data, be sure to click "Save" at the bottom of the page.

### Measures that do not apply to your hospital

If a measure does not apply to your hospital, please make sure you enter "NA" into the Hospital Measure Reporting application for that particular measure. If an entire measure set does not apply, please check the box "Do not provide service"  on each page of the Hospital Measure Reporting application that does not apply to your hospital. Doing so will fill in all data fields on the page with "NA". If you entered "NA" for the last reporting period, you will see "NA" in the measure fields for the **first two quarters of 2012 upon entering the application. In order to auto-populate the data fields for the last two quarters of 2012**, click the "Do not provide service" check box once. Un-checking the box will cause all "NA" fields to revert to blanks. **Please note** - this includes all "NA" values, even those which may have been pre-populated from the previous data submission. If this occurs by mistake, you may click the "Cancel" button to revert back to the last saved version of the page or check the "Do not provide service" box. When making any changes, always be sure to click "Save" at the bottom of the page. If "NA" is indicated for all quarters of an individual measure or measure set, the footnote **"This hospital does not provide this service"** will be displayed on Ohio Hospital Compare.

## Measures that your hospital is unable to collect/calculate, but your hospital does provide the service

If the text “NODATA” is entered across the row for any measure, the footnote “**Data not available for this hospital**” will be displayed on Ohio Hospital Compare.

### HCAHPS

If your hospital **did not participate** in the patient satisfaction survey known as (HCAHPS), please select “NA” from the “Number of Completed Surveys” pull-down menu. This will result in an auto-population of “Note 5” into the appropriate fields on the remainder of the page and the following footnote "**Patient satisfaction data are not available for this hospital**" will be displayed on Ohio Hospital Compare. If your hospital **does participate** in the HCAHPS, **obtain the data from the Q Net preview reports**. Hospitals should print off these reports during the time period the data is available for review. The preview report schedule can be obtained at this website:

[http://www.hcahpsonline.org/Files/\(1\)HCAHPS%20Public%20Reporting%20April%202012%20to%20October%202013.pdf](http://www.hcahpsonline.org/Files/(1)HCAHPS%20Public%20Reporting%20April%202012%20to%20October%202013.pdf)

### Sample size:

Sample sizes are allowed for the following measure sets: Acute Myocardial Infarction (AMI), Heart Failure (HF), Pneumonia (PN), Surgical Care Improvement Project (SCIP), Children’s Asthma Care (CAC) and Stroke. You must follow the CMS and Joint Commission guidelines for determining and calculating sample size. If you used a sample of the population, make sure to select “Yes” for the question “Is data calculated from a sample?” located at the top of the Hospital Measure Reporting application screen for each of the above-mentioned measure sets. A sample size for Elective Delivery only under the Perinatal/Pregnancy metric set is also permitted. However, this sample should be indicated by entering a remark in the comment field since the pull down menu is not available at this time.

Is data calculated from a sample?	Yes
	Please select
	Yes
	No
	NA

### Calculated measure, but no patients met inclusion criteria

If your hospital serves the population of any measure, but your hospital did not have any patients that met the inclusion criteria for the measure, enter “0” into the numerator and denominator fields. The footnote “**This hospital provides this service but 0 patients met the criteria for inclusion in the measure**” will be displayed on Ohio Hospital Compare.

### Saving data

Be sure to save your data after entering **all** fields on each page. If your data saved successfully without error, you will see a green checkmark beside the measure set name  **Heart Failure (HF)**. If you do not see this green checkmark, scroll to the top of the page and look for **RED** text that will explain the errors on the page. Correct the errors and click “Save” again.

### Less than 25 cases

If your denominator does not add up to 25 over the four quarters of data, the footnote “**This hospital does not have enough data to reliably tell how well it is doing.**” will be displayed on Ohio Hospital Compare along with the total numerator and denominator (i.e., 12/22).

### Public website display

The total rate or volume for the 12 month period and the total numerator and denominator will be displayed on Ohio Hospital Compare along with any footnotes that apply to the data you submitted.

### Comments

All comments you provide in the comment section under the notepad  that is displayed beside each measure and on the final “Verify and Submit” page, will be displayed on Ohio Hospital Compare. Enter only comments that

pertain specifically to the integrity of the data provided. Please **do not** use acronyms or medical terms. Your comments need to be understandable from a consumer’s perspective.

### Changing data after you have verified and submitted it

You may log back into the system once you have submitted your data if you need to change any of your data or comments. Simply log back in, make the needed changes, **resave each page** you make a change to and be sure to go to the final “Verify and Submit” page to **reaffirm your data and resubmit**. If you do not do this last step your new data will not replace the old values.

## Full List of Measures Required to be Reported

Centers for Medicare and Medicaid Services (CMS)/The Joint Commission
<b><u>Acute Myocardial Infarction</u></b>
AMI-1: Aspirin at Arrival
AMI-2: Aspirin at Discharge
AMI-3: ACEI or ARB for LVSD
AMI-5: Beta Blocker at Discharge
AMI-8a: Primary PCI Received Within 90 Minutes of Hospital Arrival
Mort-30-AMI: AMI 30-Day Mortality
<b><u>Heart Failure</u></b>
HF-1: Discharge Instructions
HF-2: Evaluation of LVS Function
HF-3: ACEI or ARB for LVSD
<b><u>Pneumonia</u></b>
PN-3b: Blood Culture Performed in Emergency Department Prior to Initial Antibiotic Received in Hospital
PN-6: Initial Antibiotic Selection for Community-Acquired Pneumonia (CAP) in Immunocompetent Patients
<b><u>Surgical Care Improvement Project (SCIP)</u></b>
SCIP-Inf 1a- h: Prophylactic Antibiotic Received Within One Hour Prior to Surgical Incision – (Overall Rate, CABG, Other Cardiac Surgery, Hip Arthroplasty, Knee Arthroplasty, Colon Surgery, Hysterectomy, Vascular Surgery)
SCIP-Inf-2a- h: Prophylactic Antibiotic Selection for Surgical Patients – (Overall Rate, CABG, Other Cardiac Surgery, Hip Arthroplasty, Knee Arthroplasty, Colon Surgery, Hysterectomy, Vascular Surgery)
SCIP-Inf-3a- h: Prophylactic Antibiotics Discontinued within 24 Hours after Surgery End Time – (Overall Rate, CABG, Other Cardiac Surgery, Hip Arthroplasty, Knee Arthroplasty, Colon Surgery, Hysterectomy, Vascular
SCIP-Card-2: Surgery Patients on Beta-Blocker Therapy Prior to Admission who Received a Beta-Blocker during the Perioperative Period
SCIP-VTE-1: Surgery Patients with Recommended Venous Thromboembolism Prophylaxis Ordered
SCIP-VTE-2: Surgery Patients who Received Appropriate Venous Thromboembolism Prophylaxis Within 24 Hours Prior to Surgery to 24 Hours after Surgery
<b><u>Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS)</u></b>
Communication with Nurses
Communication with Doctors
Responsiveness of Hospital Staff
Pain Management
Communication about Medicines
Cleanliness of Hospital Environment
Quietness of Hospital Environment
Discharge Information
Overall Rating of this Hospital
Willingness to Recommend This Hospital

<b>CMS/The Joint Commission</b>
<b><u>Stroke Measures</u></b>
STK-1: Venous Thromboembolism (VTE) Prophylaxis
STK-2: Discharged on Antithrombotic Therapy
STK-3: Anticoagulation Therapy for Atrial Fibrillation/Flutter
STK-4: Thrombolytic Therapy
STK-5: Antithrombotic Therapy by End of Hospital Day Two
STK-6: Discharged on Statin Medication
STK-8: Stroke Education
STK-10: Assessed for Rehabilitation
<b>Agency for Healthcare Research and Quality (AHRQ)</b>
<b><u>Other Heart Measures</u></b>
IQI-6: Percutaneous Coronary Intervention (Angioplasty) (PCTA) Volume
IQI-30: Percutaneous Coronary Intervention (Angioplasty ) (PCTA) Mortality Rate
IQI-5: Coronary Artery Bypass Graft (CABG) Volume
IQI-12: Coronary Artery Bypass Graft (CABG) Mortality Rate
<b><u>Patient Safety Measures</u></b>
PSI-3: Pressure Ulcer
<b>PSI-5: Retained Surgical Item or Unretrieved Device Fragment Count</b>
<b>Centers for Disease Control and Prevention- National Healthcare Safety Network (NHSN)</b>
<b><u>Infection Measures</u></b>
Surgical Site Infection Event - Coronary Artery Bypass Graft with both Chest and Donor Site Incisions, Coronary Artery Bypass Graft with Chest Incision Only, C-Section and Knee Prosthesis
Hospital-Acquired <i>Clostridium difficile</i> ( <i>C. Diff.</i> )
Hospital-Acquired Methicillin Resistant and Methicillin Susceptible <i>Staphylococcus aureus</i> Bacteremia (MRSA/MSSA Bacteremia) (SAB)
<b><u>Other Ohio Infection Measures</u></b>
Influenza Vaccination of Hospital Employees
Hand-washing Program
Infection Control Staffing
<b>Perinatal Measures</b>
Cesarean Section (NTSV CS Rate)
Infants Under 1500g Delivered at Appropriate Level of Care
Antenatal Steroids
Incidence of Episiotomy
Elective Delivery
<b>Pediatric Measures</b>
<b><u>The Joint Commission - Children's Asthma Care</u></b>
CAC-1a: Relievers for Inpatient Asthma (age 2-17) overall rate
CAC-2a: Systemic Corticosteroids for Inpatient Asthma (age 2-17) overall rate
<b><u>CDC &amp; NHSN Infection Measures</u></b>
Prophylactic Antibiotic Received within One Hour Prior to Surgical Incision
Catheter- Associated Bloodstream Infection Rate for ICU Patients
Surgical Site Infection Rate - cardiothoracic, neurosurgical and orthopedic procedures

## Important Notes to Hospitals for 2013

<b>Retired Measures</b>	
CMS eliminated the below measures from reporting beginning with 1/1/2012 discharges. You will no longer see these metrics in the Hospital Measures Reporting System.	
<b>Acute Myocardial Infarction</b>	<b>AMI-4:</b> Adult Smoking Cessation Advice/Counseling
<b>Heart Failure</b>	<b>HF-4:</b> Adult Smoking Cessation Advice/Counseling
<b>Pneumonia</b>	<b>PN-2:</b> Pneumococcal Vaccination <b>PN-4:</b> Adult Smoking Cessation Advice/Counseling <b>PN5c:</b> Initial Antibiotic Received Within 6 Hours of Hospital Arrival <b>PN-7:</b> Influenza Vaccination
ODH will no longer collect data for the appropriateness of care (all-or-none) measures beginning with 1/1/2012 discharges. You will no longer see these metrics in the Hospital Measures Reporting System.	
<b>Acute Myocardial Infarction</b>	<b>AMI All-or-None</b>
<b>Heart Failure</b>	<b>HF All-or-None</b>
<b>Pneumonia</b>	<b>PN All-or-None</b>
<b>Surgical Care Improvement Project</b>	<b>SCIP All-or-None</b>

<b>Centers for Disease Control and Prevention- National Healthcare Safety Network (NHSN) – SSI</b>
Beginning January 1, 2013, surveillance for knee and CABG procedures will be <b>90 days</b> instead of 365 days. Data collected for the revised surveillance period will not be reported until the April 1, 2014 submission (July 1, 2012 – June 30, 2013). The complete SSI manual can be found at <a href="http://www.cdc.gov/nhsn/settings.html">http://www.cdc.gov/nhsn/settings.html</a> .

## Hospital Performance Measure Reporting Time Frames

Measure Name	Due to ODH Oct. 1, 2013	Who Must Report
	Reporting Time Frame	
<b>Acute Myocardial Infarction</b>		
AMI-1: Aspirin at Arrival	Jan. 1, 2012 – Dec. 31, 2012 Qtrs. 1 - 4, 2012	All hospitals except children's <sup>1</sup>
AMI-2: Aspirin at Discharge		
AMI-3: Angiotensin Converting Enzyme Inhibitor (ACEI) or Angiotensin Receptor Blocker (ARB) for Left Ventricular Systolic Dysfunction (LVSD)		
AMI-5: Beta-Blocker at Discharge		
AMI-8a: Primary PCI Received Within 90 Minutes of Hospital Arrival		
Mort-30-AMI: AMI 30-Day Mortality	July 1, 2009 - June 30, 2012 (3 year rate)	All hospitals except children's <sup>1</sup>
<b>Heart Failure</b>		
HF-1: Discharge Instructions	Jan. 1, 2012 - Dec. 31, 2012 Qtrs. 1 - 4, 2012	All hospitals except children's <sup>1</sup>
HF-2: Evaluation of LVS Function		
HF-3: ACEI or ARB for LVSD		
<b>Pneumonia</b>		
PN-3b: Blood Cultures Performed in Emergency Department Prior to Initial Antibiotic Received in Hospital	Jan. 1, 2012 - Dec. 31, 2012 Qtrs. 1 - 4, 2012	All hospitals except children's <sup>1</sup>
PN-6: Initial Antibiotic Selection for Community-Acquired Pneumonia (CAP) in Immunocompetent Patients		
<b>Surgical Care Improvement Project (SCIP)</b>		
SCIP-Inf 1a - h: Prophylactic Antibiotic Received Within One Hour Prior to Surgical Incision - (Overall Rate, CABG, Other Cardiac Surgery, Hip Arthroplasty, Knee Arthroplasty, Colon Surgery, Hysterectomy and Vascular Surgery)	Jan. 1, 2012 - Dec. 31, 2012 Qtrs. 1 - 4, 2012	All hospitals except children's <sup>1</sup>
SCIP-Inf-2a - h: Prophylactic Antibiotic Selection for Surgical Patients - (Overall Rate, CABG, Other Cardiac Surgery, Hip Arthroplasty, Knee Arthroplasty, Colon Surgery, Hysterectomy and Vascular Surgery)		
SCIP-Inf-3a - h: Prophylactic Antibiotics Discontinued within 24 Hours after Surgery End Time - (Overall Rate, CABG, Other Cardiac Surgery, Hip Arthroplasty, Knee Arthroplasty, Colon Surgery, Hysterectomy and Vascular Surgery)		
SCIP-Card-2: Surgery Patients on Beta Blocker Therapy Prior to Admission who Received a Beta Blocker during the perioperative period	Jan. 1, 2012 - Dec. 31, 2012 Qtrs. 1 - 4, 2012	All hospitals except children's <sup>1</sup>
SCIP-VTE-1: Surgery Patients with Recommended Venous Thromboembolism Prophylaxis Ordered		
SCIP-VTE-2: Surgery Patients who Received Appropriate Venous Thromboembolism Prophylaxis Within 24 Hours Prior to Surgery to 24 Hours after Surgery		

<b>Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS)</b>		
Communication with Nurses	Jan. 1, 2012 - Dec. 31, 2012 Qtrs. 1 - 4, 2012	All hospitals except children's <sup>1</sup> must report.
Communication with Doctors		
Responsiveness of Hospital Staff		
Pain Management		
Communication about Medicines		
Cleanliness of Hospital Environment		
Quietness of Hospital Environment		
Discharge Information		
Overall Rating of this Hospital		
Willingness to Recommend This Hospital		
<b>JC/CMS Stroke Measures</b>		
STK-1: Venous Thromboembolism (VTE) Prophylaxis	Jan. 1, 2012 - Dec. 31, 2012 Qtrs. 1 - 4, 2012	All hospitals except children's <sup>1</sup> must report.
STK-2: Discharged on Antithrombotic Therapy		
STK-3: Anticoagulation Therapy for Atrial Fibrillation/Flutter		
STK-4: Thrombolytic Therapy		
STK-5: Antithrombotic Therapy By End of Hospital Day 2		
STK-6: Discharged on Statin Medication		
STK-8: Stroke Education		
STK-10: Assessed for Rehabilitation		
<b>AHRQ Other Heart Measures</b>		
IQI-5: Coronary Artery Bypass Graft (CABG) volume	Jan. 1, 2012 - Dec. 31, 2012 Qtrs. 1 - 4, 2012	All hospitals except children's <sup>1</sup>
IQI-6: Percutaneous Coronary Intervention (PCTA) volume		
IQI-12: Coronary Artery Bypass Graft (CABG) mortality rate		
IQI-30: Percutaneous Coronary Intervention (PCTA) mortality rate		
<b>AHRQ Patient Safety Measures</b>		
PSI-3: Pressure Ulcer	Jan. 1, 2012 - Dec. 31, 2012 Qtrs. 1 - 4, 2012	All hospitals except children's <sup>1</sup>
PSI-5: Retained Surgical Item or Unretrieved Device Fragment Count		
<b>Centers for Disease Control and Prevention- National Healthcare Safety Network (NHSN) – SSI</b>		
Surgical Site Infection Event - Coronary artery bypass graft with both chest and graft site incisions (NHSN – CBGB)	Jan. 2012 - Dec. 31, 2012 Qtrs. 1 - 4, 2012	All hospitals except children's <sup>1</sup>  Report separately infections that occur in the chest for the two SSI NHSN CABG categories (CBGB & CBGC).
Surgical Site Infection Event - Coronary artery bypass graft with chest incision only (NHSN - CBGC)		
Surgical Site Infection Event - Cesarean Section		
Surgical Site Infection Event - Knee Prosthesis		

<b>Centers for Disease Control and Prevention- National Healthcare Safety Network (NHSN) –MDRO</b>		
Hospital-Acquired <i>Clostridium difficile</i> ( <i>C. Diff.</i> )	Jan. 1, 2012 - Dec. 31, 2012 Qtrs. 1 - 4, 2012	All Hospitals except children's <sup>1</sup>
Hospital-Acquired Methicillin Resistant <i>Staphylococcus aureus</i> Bacteremia (MRSA Bacteremia) (SAB)		
Hospital-Acquired Methicillin Susceptible <i>Staphylococcus aureus</i> Bacteremia (MSSA Bacteremia) (SAB)		
<b>Infection Prevention</b>		
Hand-washing Program	What was in place as of Dec. 31, 2012	All Hospitals
Infection Control Staffing		
Influenza Vaccination for Hospital Employees	2012/2013 Flu Season (Sept., 1, 2012 – Mar. 31, 2013)	All Hospitals
<b>Pregnancy Measures</b>		
Cesarean Rate (NTSV CS Rate)	Calculated using birth certificate data for Jan. 1, 2012 – Dec. 31, 2012	All Hospitals except children's <sup>1</sup>
Infants Under 1500g Delivered at Appropriate Level of Care		
Antenatal Steroids	Jan. 1, 2012 – Dec. 31, 2012 Qtrs. 1 - 4, 2012	
Incidence of Episiotomy		
Elective Delivery Prior to 39 Completed Weeks Gestation		
<b>Children's Asthma Care Measures</b>		
CAC-1a: Relievers for Inpatient Asthma (age 2-17) overall rate	Jan. 1, 2012 – Dec. 31, 2012 Qtrs. 1 - 4, 2012	Children's <sup>1</sup> Hospitals and all Hospitals that provide pediatric services
CAC-2a: Systemic Corticosteroids for Inpatient Asthma (age 2-17) overall rate		
<b>Pediatric Infection Measures</b>		
Prophylactic Antibiotic Received within Prior to Surgical Incision	Jan. 1, 2012 – Dec. 31, 2012 Qtrs. 1 - 4, 2012	Note: CA-BSI must be reported by all hospitals for patients < 18 with central lines and who are served in an ICU (NICU excluded).
Catheter Associated Bloodstream Infection Rate for ICU Patients (CA-BSI)		
Surgical Site Infection Rate for cardiothoracic, neurosurgical and orthopedic procedures		

<sup>1</sup> (V) "Children's hospital" means any of the following:

(1) A hospital registered under section 3701.07 of the Revised Code that provides general pediatric medical and surgical care, and in which at least seventy-five per cent of annual inpatient discharges for the preceding two calendar years were individuals less than eighteen years of age;

(2) A distinct portion of a hospital registered under section 3701.07 of the Revised Code that provides general pediatric medical and surgical care, has a total of at least one hundred fifty registered pediatric special care and pediatric acute care beds, and in which at least seventy-five per cent of annual inpatient discharges for the preceding two calendar years were individuals less than eighteen years of age;

(3) A distinct portion of a hospital, if the hospital is registered under section 3701.07 of the Revised Code as a children's hospital and the children's hospital meets all the requirements of division (V)(1) of this section.

## Centers for Medicare and Medicaid Services and Joint Commission Measures

Hospitals should use the version of the specifications that were in place when the data was collected for the measures below. For example, hospitals should use version 4.0c for the 1st – 2nd quarter of 2012 and version 4.1 for the 3<sup>rd</sup> – 4<sup>th</sup> quarter 2012. Specifications can be found at the following web address: <http://www.qualitynet.org/dcs/ContentServer?cid=1141662756099&pagename=QnetPublic%2FPage%2FQnetTier2&c=Page>

### Acute Myocardial Infarction (AMI)

- AMI-1: Aspirin at Arrival
- AMI-2: Aspirin Prescribed at Discharge
- AMI-3: Angiotensin Converting Enzyme Inhibitor (ACEI) or Angiotensin Receptor Blocker (ARB) for Left Ventricular Systolic Dysfunction (LVSD)
- AMI-5: Beta-Blocker at Prescribed at Discharge
- AMI-8a: Primary PCI Received Within 90 Minutes of Hospital Arrival

### Risk-Standardized 30-Day Mortality Measures

- Mort-30-AMI: Acute Myocardial Infarction (AMI) 30-Day Mortality
  - This is a risk-standardized rate calculated by CMS using claims-based data. Hospitals can obtain this rate from My Quality Net. Use this link to obtain the [Timeline](#) the data will be available for preview.

### Heart Failure (HF)

- HF-1: Discharge Instructions
- HF-2: Evaluation of LVS Function
- HF-3: ACEI or ARB for LVSD

### Pneumonia (PN)

- PN-3b: Blood Cultures Performed in Emergency Department Prior to Initial Antibiotic Received in Hospital
- PN-6: Initial Antibiotic Selection for Community-Acquired Pneumonia (CAP) in Immunocompetent Patient

### Surgical Care Improvement Project (SCIP)

- SCIP-Inf-1a-h: Prophylactic Antibiotic Received Within One Hour Prior to Surgical Incision (Overall Rate, CABG, Other Cardiac Surgery, Hip Arthroplasty, Knee Arthroplasty, Colon, Hysterectomy and Vascular Surgery)
- SCIP-Inf-2a-h: Prophylactic Antibiotic Selection for Surgical Patients (Overall Rate, CABG, Other Cardiac Surgery, Hip Arthroplasty, Knee Arthroplasty, Colon, Hysterectomy and Vascular Surgery)
- SCIP-Inf-3a-h: Prophylactic Antibiotics Discontinued Within 24 Hours After Surgery End Time (Overall Rate, CABG, Other Cardiac Surgery, Hip Arthroplasty, Knee Arthroplasty, Colon, Hysterectomy and Vascular Surgery)
- SCIP-Card-2: Surgery Patients on Beta-Blocker Therapy Prior to **Arrival** Who Received a Beta Blocker During the Perioperative Period
- SCIP-VTE-1: Surgery Patients with Recommended Venous Thromboembolism Prophylaxis Ordered
- SCIP-VTE-2: Surgery Patients who Received Appropriate Venous Thromboembolism Prophylaxis Within 24 Hours Prior to Surgery to 24 Hours after Surgery

### Children's Asthma Care (CAC)

- CAC-1a: Relievers for Inpatient Asthma (age 2-17 years) - Overall Rate
- CAC2a: Systemic Corticosteroids for Inpatient Asthma (age 2-17 years) - Overall Rate

## Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS)

**Hospitals must report the CMS adjusted rate.** For example, report the total percentage for each of the categories below for **quarter 1, 2012 through quarter 4, 2012 by October 1, 2013**. Report only the percentage for the “always” category and obtain the percentages from the **Quality Net preview reports**.

The preview report schedule can be obtained at:

[http://www.hcahpsonline.org/Files/\(1\)HCAHPS%20Public%20Reporting%20April%202012%20to%20October%202013.pdf](http://www.hcahpsonline.org/Files/(1)HCAHPS%20Public%20Reporting%20April%202012%20to%20October%202013.pdf).

If your preview report has expired, you can contact one of the individuals below at Ohio KePRO to obtain your data.

Contact Name	Telephone Number	Email Address
Angila Anderson	216-287-9161	AAnderson@ohqio.sdps.org
Christine Martini	216-308-4542	cmartini@ohqio.sdps.org

### HCAHPS

- Communication with Nurses - (questions 1, 2 and 3)
- Communication with Doctors - (questions 5, 6, and 7)
- Responsiveness of Hospital Staff - (questions 4 and 11)
- Pain Management - (questions 13 and 14)
- Communication about Medicines - (questions 16 and 17)
- Discharge Information - (questions 19 and 20)
- Cleanliness of Hospital Environment - (question 8)
- Quietness of Hospital Environment - (question 9)
- Overall Rating of Hospital - (question 21)
- Willingness to Recommend Hospital - (question 22)

Hospitals should report only the “Always” rate for the following:

- Communication with Nurses
- Communication with Doctors
- Responsiveness of Hospital Staff
- Pain Management
- Communication about Medicines
- Discharge Information
- Cleanliness of Hospital Environment
- Quietness of Hospital Environment

For **Willingness to Recommend**, report the “Definitely yes” only

For **Overall Rating**, report ratings 9 and 10 combined

## Stroke Measures

All hospitals except children's, regardless of being Joint Commission certified for stroke, should have begun collecting the stroke measures listed below beginning with January 1, 2011 discharges. This data was initially due to ODH by October 1, 2012.

Further details on the stroke specifications can be found at:

<http://www.qualitynet.org/dcs/ContentServer?cid=1141662756099&pagename=QnetPublic%2FPage%2FQnetTier2&c=Page>

### Stroke (STK)

STK-1: Venous Thromboembolism (VTE) Prophylaxis

STK-2: Discharged on Antithrombotic Therapy

STK-3: Anticoagulation Therapy for Atrial Fibrillation/Flutter

STK-4: Thrombolytic Therapy

STK-5: Antithrombotic Therapy By End of Hospital Day 2

STK-6: Discharged on Statin Medication

STK-8: Stroke Education

STK-10: Assessed for Rehabilitation

## Agency for Healthcare Research Quality (AHRQ) Heart Measures



The below AHRQ measure specifications can be found at [http://www.qualityindicators.ahrq.gov/Modules/IQI\\_TechSpec.aspx](http://www.qualityindicators.ahrq.gov/Modules/IQI_TechSpec.aspx). The below definitions are taken from the Inpatient Quality Indicator Technical Specifications **Version 4.5, May 2013**.

### **IQI 5: Coronary Artery Bypass Graft (CABG) Volume**

#### **Numerator**

Discharges, **for patients** age 18 years and older **or MDC 14 (pregnancy, childbirth and puerperium), with any-listed** ICD-9-CM **procedure** codes for CABG.

ICD-9-CM CABG procedure codes:

36.10	AORTOCORONARY BYPASS NOS	36.15	1 INT MAM-COR ART BYPASS
36.11	AORTOCOR BYPAS-1 COR ART	36.16	2 INT MAM-COR ART BYPASS
36.12	AORTOCOR BYPAS-2 COR ART	36.17	ABD-CORON ART BYPASS
36.13	AORTOCOR BYPAS-3 COR ART	36.19	HRT REVAS BYPS ANAS NEC
36.14	AORTCOR BYPAS-4+ COR ART		

Exclude cases:

- with missing gender (SEX=missing), age (AGE=missing), quarter (DQTR=missing), year (YEAR=missing) or principal diagnosis (DX1=missing)

Note: Include CABG in ANY procedure field even if valve replacement procedures were also coded as part of a CABG procedure.

#### **Denominator**

Not applicable.

### **IQI 12: Coronary Artery Bypass Graft (CABG) Mortality Rate**

#### **Numerator**

Number of deaths (DISP=20) among cases meeting the inclusion and exclusion rules for the denominator.

#### **Denominator**

Discharges, **for patients** ages 40 years and older, with **any-listed** ICD-9-CM CABG procedure codes for CABG.

ICD-9-CM CABG procedure codes:

36.10	AORTOCORONARY BYPASS NOS	36.15	1 INT MAM-COR ART BYPASS
36.11	AORTOCOR BYPAS-1 COR ART	36.16	2 INT MAM-COR ART BYPASS
36.12	AORTOCOR BYPAS-2 COR ART	36.17	ABD-CORON ART BYPASS
36.13	AORTOCOR BYPAS-3 COR ART	36.19	HRT REVAS BYPS ANAS NEC
36.14	AORTCOR BYPAS-4+ COR ART		

Exclude cases:

- transferring to another short-term hospital (DISP=2)
- MDC 14 (pregnancy, childbirth, and puerperium)
- Missing discharge disposition (DISP=missing), gender (SEX=missing), age (AGE=missing), quarter (DQTR=missing), year (YEAR=missing) or principal diagnosis (DX1=missing)

Note: Count death using the discharge date.

## IQI 6: Percutaneous Coronary Intervention (PCI) Volume

### Numerator

Discharges, for patients ages 18 years and older or MDC 14 (pregnancy, childbirth and puerperium), with any-listed ICD-9-CM procedure codes for PCI.

ICD-9-CM PCI procedure codes<sup>1</sup>:

00.66	PTCA	36.02	<i>PTCA-1 VESSEL WITH AGNT</i>
36.01	<i>PTCA-1 VESSEL W/O AGENT</i>	36.05	<i>PTCA-MULTIPLE VESSEL</i>

<sup>1</sup>*Italicized codes are not active in the current fiscal year.*

Exclude cases:

- with missing gender (SEX=missing), age (AGE=missing), quarter (DQTR=missing), year (YEAR=missing) or principal diagnosis (DX1=missing)

Notes:

- Include inpatient procedures only.
- If your hospital no longer uses codes 36.01, 36.02 and 36.05 noted above, you can use the following codes. Use code 00.40 -00.43 to identify how many vessels were treated and then use code 36.06 if no drug-eluting agent was used and code 36.07 if a drug-eluting agent was used. Please note that because the following codes are not specific to PTCA, this is not the preferred method to calculate the measure.

### Denominator

Not applicable.

## IQI 30: Percutaneous Coronary Intervention (PCI) Mortality Rate

### Numerator

Number of deaths (DISP=20) among cases meeting the inclusion and exclusion rules for the denominator.

### Denominator

Discharges, for patients ages 40 years and older, with any-listed ICD-9-CM PCI procedure codes for PCI.

ICD-9-CM PCI procedure codes<sup>1</sup>:

00.66	PTCA	36.02	<i>PTCA-1 VESSEL WITH AGNT</i>
36.01	<i>PTCA-1 VESSEL W/O AGENT</i>	36.05	<i>PTCA-MULTIPLE VESSEL</i>

<sup>1</sup>*Italicized codes are not active in the current fiscal year.*

Exclude cases:

- MDC 14 (pregnancy, childbirth, and puerperium)
- transferring to another short-term hospital (DISP=2)
- with missing discharge disposition (DISP=missing), gender (SEX=missing), age (AGE=missing), quarter (DQTR=missing), year (YEAR=missing) or principal diagnosis (DX1=missing)

Notes:

- Include inpatient procedures only.
- Count death using the discharge date.
- If your hospital no longer uses codes 36.01, 36.02 and 36.05 noted above, you can use the following codes. Use code 00.40 -00.43 to identify how many vessels were treated and then use code 36.06 if no drug-eluting agent was used and code 36.07 if a drug-eluting agent was used. Please note that because the following codes are not specific to PTCA, this is not the preferred method to calculate the measure.

## PSI 3: Pressure Ulcer Rate

### Numerator

Discharges among cases meeting the inclusion and exclusion rules for the denominator, with any secondary ICD-9-CM diagnosis codes for pressure ulcer and any secondary ICD-9-CM diagnosis codes for pressure ulcer stage III or IV (or unstageable).

ICD-9-CM Pressure ulcer diagnosis codes<sup>1</sup>:

707.0	<i>PRESSURE ULCER</i>	707.04	PRESSURE ULCER, HIP
707.00	PRESSURE ULCER, SITE NOS	707.05	PRESSURE ULCER, BUTTOCK
707.01	PRESSURE ULCER, ELBOW	707.06	PRESSURE ULCER, ANKLE
707.02	PRESSURE ULCER, UPR BACK	707.07	PRESSURE ULCER, HEEL
707.03	PRESSURE ULCER, LOW BACK	707.09	PRESSURE ULCER, SITE NEC

<sup>1</sup>*Italicized codes are not active in the current fiscal year.*

ICD-9-CM Pressure ulcer stage diagnosis codes\*:

707.23	PRESSURE ULCER, STAGE III	707.25	PRESSURE ULCER, UNSTAGEBL
707.24	PRESSURE ULCER, STAGE IV		

\* Valid for discharges on or after 10/1/2008

### Denominator

Surgical and medical discharges, for patients ages 18 years and older. Surgical and medical discharges are defined by specific DRG or MS-DRG codes.

See *Patient Safety Indicators Appendices*:

(Appendices can be found at [http://www.qualityindicators.ahrq.gov/Modules/PSI\\_TechSpec.aspx](http://www.qualityindicators.ahrq.gov/Modules/PSI_TechSpec.aspx))

Exclude cases:

- with length of stay of less than 5 days
- with a principal ICD-9-CM diagnosis code for pressure ulcer (see above)
- with any secondary ICD-9-CM diagnosis codes for pressure ulcer (see above) present on admission and any secondary ICD-9-CM diagnosis codes for pressure ulcer stage III or IV (or unstageable, see above) present on admission
- with any-listed ICD-9-CM diagnosis codes for hemiplegia, paraplegia, or quadriplegia
- with any-listed ICD-9-CM diagnosis of spina bifida or anoxic brain damage
- with any-listed ICD-9-CM procedure codes for debridement or pedicle graft before or on the same day as the major operating room procedure (surgical cases only)
- with any-listed ICD-9-CM procedure codes for debridement or pedicle graft as the only major operating room procedure (surgical cases only)
- transfer from a hospital (different facility)
- transfer from a Skilled Nursing Facility (SNF) or Intermediate Care Facility (ICF)
- MDC 9 (skin, subcutaneous tissue, and breast)
- MDC 14 (pregnancy, childbirth, and puerperium)

- transfer from another health care facility
  - with missing gender (SEX=missing), age (AGE=missing), quarter (DQTR=missing), year (YEAR=missing), or principal diagnosis (DX1=missing)
- \* Only for cases that otherwise qualify for the numerator**

See *Patient Safety Indicators Appendices*:

Appendix A – Operating Room Procedure Codes

Appendix J – Admission Codes for Transfers

*ICD-9-CM Hemiplegia, paraplegia, or quadriplegia diagnosis codes<sup>1</sup>:*

333.71	ATHETOID CEREBRAL PALSY	344.2	DIPLEGIA OF UPPER LIMBS
334.1	HERED SPASTIC PARAPLEGIA	344.3	MONOPLEGIA OF LOWER LIMB
342.0	FLACCID HEMIPLEGIA	344.30	MONPLGA LWR LMB UNSP SDE
342.00	FLCCD HMIPLGA UNSPF SIDE	344.31	MONPLGA LWR LMB DMNT SDE
342.01	FLCCD HMIPLGA DOMNT SIDE	344.32	MNPLG LWR LMB NONDMNT SD
342.02	FLCCD HMIPLG NONDMNT SDE	344.4	MONOPLEGIA OF UPPER LIMB
342.1	SPASTIC HEMIPLEGIA	344.40	MONPLGA UPR LMB UNSP SDE
342.10	SPSTC HMIPLGA UNSPF SIDE	344.41	MONPLGA UPR LMB DMNT SDE
342.11	SPSTC HMIPLGA DOMNT SIDE	344.42	MNPLG UPR LMB NONDMNT SD
342.12	SPSTC HMIPLG NONDMNT SDE	344.5	MONOPLEGIA NOS
342.80	OT SP HMIPLGA UNSPF SIDE	344.60	CAUDA EQUINA SYND NOS
342.81	OT SP HMIPLGA DOMNT SIDE	344.61	NEUROGENIC BLADDER
342.82	OT SP HMIPLG NONDMNT SDE	344.8	OTHER SPECIFIED PARALYTIC SYNDROMES
342.9	HEMIPLEGIA, UNSPECIFIED	344.81	LOCKED-IN STATE
342.90	UNSP HEMIPLGA UNSPF SIDE	344.89	OTH SPCF PARALYTIC SYND
342.91	UNSP HEMIPLGA DOMNT SIDE	344.9	PARALYSIS NOS
342.92	UNSP HMIPLGA NONDMNT SDE	438.20	LATE EF-HEMPLGA SIDE NOS
343.0	CONGENITAL DIPLEGIA	438.21	LATE EF-HEMPLGA DOM SIDE
343.1	CONGENITAL HEMIPLEGIA	438.22	LATE EF-HEMIPLGA NON-DOM
343.2	CONGENITAL QUADRIPLGIA	438.30	LATE EF-MPLGA UP LMB NOS
343.3	CONGENITAL MONOPLEGIA	438.31	LATE EF-MPLGA UP LMB DOM
343.4	INFANTILE HEMIPLEGIA	438.32	LT EF-MPLGA UPLMB NONDOM
343.8	CEREBRAL PALSY, NEC	438.40	LTE EF-MPLGA LOW LMB NOS
343.9	CEREBRAL PALSY, NOS	438.41	LTE EF-MPLGA LOW LMB DOM
344.0	QUADRIPLGIA AND QUADRIPARESIS	438.42	LT EF-MPLGA LOWLMB NONDM
344.00	QUADRIPLGIA, UNSPECIFD	438.50	LT EF OTH PARAL SIDE NOS
344.01	QUADRPLG C1-C4, COMPLETE	438.51	LT EF OTH PARAL DOM SIDE
344.02	QUADRPLG C1-C4, INCOMPLT	438.52	LT EF OTH PARALS NON-DOM
344.03	QUADRPLG C5-C7, COMPLETE	438.53	LT EF OTH PARALS-BILAT
344.04	QUADRPLG C5-C7, INCOMPLT	<b>7687</b>	<b>HYPOXIC-ISCHEMIC ENCEPH</b>
344.09	OTHER QUADRIPLGIA	768.70	HYPOXIC-ISCHEMIC ENCEPH NOS
344.1	PARAPLEGIA NOS	768.72	MOD HYPOX-ISCHEMIC ENCEPH
		768.73	SEV HYPOX-ISCHEM ENCEPH

<sup>1</sup>Italicized codes are not active in the current fiscal year.

*ICD-9-CM Spina bifida or anoxic brain damage diagnosis codes:*

348.1	ANOXIC BRAIN DAMAGE	741.90	SPINA BIFIDA
741.00	SPIN BIF W HYDROCEPH NOS	741.91	SPINA BIFIDA-CERV
741.01	SPIN BIF W HYDROCEPH-CERV	741.92	SPINA BIFIDA-DORSAL
741.02	SPINA BIF W HYDROCEPH-DORS	741.93	SPINA BIFIDA-LUMBAR
741.03	SPINA BIF W HYDROCEPH-LUMB	768.5	SEVERE BIRTH ASPHYXIA

ICD-9-CM Debridement or pedicle graft procedure codes:

83.45	OTHER MYECTOMY	86.71	CUT & PREP PEDICLE GRAFT
86.22	EXC WOUND DEBRIDEMENT	86.72	PEDICLE GRAFT ADVANCEMEN
86.28	NONEXCIS DEBRIDEMENT WND	86.74	ATTACH PEDICLE GRAFT NEC
86.70	PEDICLE GRAFT/FLAP NOS	86.75	REVISION OF PEDICLE GRFT

## PSI 5: Retained Surgical Item or Unretrieved Device Fragment Count

### Numerator

Surgical and medical discharges, for patients ages 18 years and older or MDC 14 (pregnancy, childbirth, and puerperium), with any secondary ICD-9-CM diagnosis codes for retained surgical item or unretrieved device fragment. Surgical and medical discharges are defined by specific DRG or MS-DRG codes.

ICD-9-CM Retained surgical item or unretrieved device fragment diagnosis codes:

998.4 FB LEFT DURING PROCEDURE  
998.7 POSTOP FORGN SUBST REACT  
E871.0 POST-SURGICAL FORGN BODY  
E871.1 POSTINFUSION FOREIGN BODY  
E871.2 POSTPERFUSION FORGN BODY  
E871.3 POSTINJECTION FORGN BODY  
E871.4 POSTENDOSCOPY FORGN BODY  
E871.5 POSTCATHETER FORGN BODY  
E871.6 FB POST HEART CATHETER  
E871.7 GB POST-CATHETER REMOVAL  
E871.8 POST-OP FOREIGN BODY NEC  
E871.9 POST-OP FOREIGN BODY NOS

See *Patient Safety Indicators Appendices*:

Appendices can be found at

<http://www.qualityindicators.ahrq.gov/Downloads/Modules/PSI/V45/TechSpecs/PSI%20Appendices.pdf>

- Appendix B – Medical Discharge DRGs
- Appendix C – Medical Discharge MS-DRGs
- Appendix D – Surgical Discharge DRGs
- Appendix E – Surgical Discharge MS-DRGs

Exclude cases:

- with a principal ICD-9-CM diagnosis code (or secondary diagnosis present on admission) for retained surgical item or unretrieved device fragment (see above)
- with missing gender (SEX=missing), age (AGE=missing), quarter (DQTR=missing), year (YEAR=missing) or principal diagnosis (DX1=missing)

### Denominator

Not applicable.

## Surgical Site Infection (SSI) Measures - Centers for Disease Control and Prevention (CDC) – National Healthcare Safety Network (NHSN)

The complete SSI manual can be found at <http://www.cdc.gov/nhsn/settings.html>.

**Settings:** Surveillance will occur with surgical patients in any inpatient setting where the selected NHSN operative procedure(s) are performed.

### Notes:

- Only count procedures done on patients  $\geq 18$  years.
- While ODH is following NHSN specifications, it is not requiring hospitals to participate in NHSN or use the referenced NHSN forms.
- *Not all procedures follow NHSN exactly.* Please pay special attention to the numerator and denominator for each SSI in Table 1.

### Definitions:

An NHSN operative procedure is a procedure

- 1) that is performed on a patient who is an NHSN inpatient and
- 2) takes place during an operation (defined as a single trip to the operating room (OR) where a surgeon makes at least one incision through the skin or mucous membrane, including laparoscopic approach, and closes the incision before the patient leaves the OR; and
- 3) that is included in Table 1.

NHSN Inpatient: A patient whose date of admission to the healthcare facility and the date of discharge are different calendar days.

Operating Room (OR): A patient care area that met the Facilities Guidelines Institute's (FGI) or American Institute of Architects' (AIA) criteria for an operating room when it was constructed or renovated. This may include an operating room, C-Section room, interventional radiology room, or a cardiac catheterization lab.

Implant: A nonhuman-derived object, material, or tissue that is placed in a patient during an operative procedure. Examples include: porcine or synthetic heart valves, mechanical heart, metal rods, mesh, sternal wires, screws, cements, internal staples, hemoclips, and other devices. Non-absorbable sutures are excluded because Infection Preventionist may not easily identify and/or differentiate the soluble nature of suture material used.

For Table 1. NHSN Operative Procedure Categories – see next page

Table 1. NHSN Operative Procedure Categories

NHSN Code	Operative Procedure	Description	ICD-9-CM Codes
CBGB	Coronary artery bypass graft with <b>both</b> chest incision and donor site incisions	Numerator: <b>Of the denominator</b> , count all <b>deep</b> incisional and organ space (mediastinitis) sternal site infections that occur in the chest incision; <b>do not</b> count infections that occur in the donor site  Denominator: Chest procedure to perform direct revascularization of the heart; includes obtaining suitable vein from donor site for grafting	36.10-36.14, 36.19
CBGC	Coronary artery bypass graft with <b>chest incision only</b>	Numerator: <b>Of the denominator</b> , count all <b>deep</b> incisional and organ space (mediastinitis) sternal site infections that occur in the chest incision  Denominator: Chest procedure to perform direct vascularization of the heart using, for example the internal mammary (thoracic) artery ( <b>note this denominator should NOT include the CBGB procedures above</b> )	36.15-36.17, 36.2
CSEC	Cesarean section	Numerator: <b>Of the denominator</b> , count all <b>deep</b> incisional and organ space infections  Denominator: Obstetrical delivery by Cesarean section	74.0, 74.1, 74.2, 74.4, 74.91, 74.99
KPRO	Knee prosthesis, primary total knee only	Numerator: <b>Of the denominator</b> , count all <b>deep</b> incisional and organ space (knee joint) infections  Denominator: Arthroplasty of knee ( <b>total knee replacement</b> )	81.54

### Numerator

All patients 18 or older with an infection (monitor for infection 30 days for CSEC, 90 days for CBGB , CBGC and KPRO if no implant and 365 days if implant).

*Beginning January 1, 2013, surveillance for knee and CABG procedures will be 90 days instead of 365 days. Data collected for the revised surveillance period will not be reported until the April 1, 2014 submission (July 1, 2012 – June 30, 2013). The complete SSI manual can be found at <http://www.cdc.gov/nhsn/settings.html>.*

### NOTES:

1. If a patient has several NHSN operative procedures prior to an infection, report the operative procedure code of the operation that was performed most closely in time prior to the infection date, unless there is evidence that the infection is associated with a different operation.
2. If a procedure from more than one NHSN operative procedure category was done through a single incision, attempt to determine the procedure that is thought to be associated with the infection. If it is not clear or if the infection site being reported is not an SSI, use the NHSN Principal Operative Procedure Selection Lists (Table 1 in the SSI protocol manual) to select which operative procedure to report.
3. Report the infection only if it is determined to be associated with one of the four SSIs selected in Table 1 above.
4. If a patient had a coronary artery bypass graft with a chest incision and a donor site incision only, count infections that occur in the chest and do not count infections in the donor site.

## Denominator

All patients 18 years or older having a procedure selected in Table 1 above.

### NOTES:

1. If more than one NHSN operative procedure is performed during the same trip to the OR, report only for the operative procedure selected in Table 1 above.

If a patient goes to the OR more than once during the same admission and another procedure is performed through the same incision within 24 hours of the original operative incision, report only one procedure. For example, a patient has a CBGC lasting 4 hours. He returns to the OR six hours later to correct a bleeding vessel. The surgeon reopens the initial incision, makes the repairs, and recloses in 1.5 hours.

## ODH calculation

Rate = (number of SSIs/number of specific operative procedures) x 100

**Report the numerator and denominator for each calendar quarter (note: the rate will be calculated for you)**

# Multidrug-Resistant Organism & *Clostridium difficile* Infection (MDRO/CDI) Module Centers for Disease Control and Prevention (CDC) – National Healthcare Safety Network (NHSN)

The complete MDRO manual can be found at <http://www.cdc.gov/nhsn/settings.html>.

## *Clostridium difficile* infection (CDI)

### Population Definition

- Using the NHSN manual, follow information provided under the “Laboratory-identified Events” section.
  - Facility-wide reporting - only one denominator for the entire facility
  - Healthcare facility-onset
- Age ≥ 18 years.

### Numerator

- A positive laboratory test result for *C. difficile* toxin A and/or B, or a toxin-producing *C. difficile* organism detected by culture or other laboratory means performed on a stool sample.
- Healthcare facility-onset: Greater than 3 days after admission (i.e., on or after day 4 with the date of admission indicated as day 1).
- Includes “incident” CDI lab results that are not duplicate tests:
  1. Duplicate: Any CDI positive laboratory assay from the same patient following a previous CDI (+) laboratory assay within the past two weeks.
  2. Incident is new or CDI from a specimen obtained > 8 weeks after the last positive *C. difficile* assay.  
New CDI cases: meets criteria for CDI and one other criteria:
    - No prior history of CDI or
      - No prior history of CDI means no known positive *C. diff* toxin in the past eight weeks (> 2 weeks and ≤ 8 weeks).
    - Last positive CDI was over 8 weeks ago

### Denominator

- Count all quarterly inpatient days
  - Quarterly inpatient days are defined as the sum of the daily facility census for each calendar quarter.
  - Inpatient day is defined as admission date being different than discharge date and patient is ≥18.
  - If patient is counted in denominator they are eligible to be included in numerator.
  - For observation patients - use the CDC NHSN definition  
[http://www.cdc.gov/nhsn/PDFs/PatientDay\\_SumData\\_Guide.pdf](http://www.cdc.gov/nhsn/PDFs/PatientDay_SumData_Guide.pdf)
  - Include patients in:
    - All acute care beds
    - Inpatient rehabilitation beds
    - Inpatient psychiatric unit beds
    - Palliative care beds
    - Swing Bed patients (regardless of where patient was transferred from)
  - Exclude patients in:
    - Long term care (Skilled Nursing) beds
    - Hospice if not admitted
    - Home Health

### ODH calculation

Rate = (N/Calc PD) x 10,000 **Report the numerator and denominator for each calendar quarter (note: the rate will be calculated for you)**

## Staphylococcus aureus – Bloodstream Infection

### Population Definition

- Reporting will be based on positive blood cultures for both methicillin-resistant *Staphylococcus aureus* (MRSA) and methicillin-sensitive *Staphylococcus aureus* (MSSA).
- Using the NHSN manual, follow information provided under the “Laboratory-identified Events” section.
  - Facility wide reporting only one denominator for the entire facility
  - Healthcare facility-onset
- Age ≥ 18 years
- Definitions:
  - a. MRSA: Includes *S. aureus* cultured from any specimen (blood) that tests oxacillin (or ceftiofuran for oxacillin) resistant by standard susceptibility testing methods, or by a positive result from molecular testing for *mecA* and *PBP2a*; these methods may also include positive results of specimens tested by any other FDA approved PCR test for MRSA.
  - b. MSSA: *S. aureus* cultured from any specimen (blood) testing as oxacillin intermediate or susceptible (or ceftiofuran susceptible for oxacillin) by standard susceptibility testing methods, or by a negative result from molecular testing for *mecA* and *PBP2a*.

### Numerator

- Number of positive blood cultures isolates for *S. aureus*:
  1. MRSA
  2. MSSA
  3. (Total for website display only = MRSA + MSSA)
- Greater than 3 days after admission (i.e., on or after day 4 with the date of admission indicated as day 1).
- Includes blood culture isolates that are unique:
  1. Unique: A *S. aureus* isolate from blood in a patient with no positive blood cultures for *S. aureus* in less than or equal to two (2) weeks (14 days).
- Include primary and secondary infections (i.e., MRSA/MSSA infection that occur first in the sputum, wound or urine).

### Denominator

- Count all quarterly inpatient days
  - Quarterly inpatient days are defined as the sum of the daily facility census for each calendar quarter.
  - Inpatient day is defined as admission date being different than discharge date and patient is ≥18.
  - If patient is counted in denominator they are eligible to be included in numerator.
  - For observation patients - use the CDC NHSN definition [http://www.cdc.gov/nhsn/PDFs/PatientDay\\_SumData\\_Guide.pdf](http://www.cdc.gov/nhsn/PDFs/PatientDay_SumData_Guide.pdf)
  - Include patients in:
    - All acute care beds
    - Inpatient rehabilitation beds
    - Inpatient psychiatric unit beds
    - Palliative care beds
    - Swing Beds (regardless of where patient was transferred from)
  - Exclude patients in:
    - Long term care (Skilled Nursing) beds
    - Hospice patient if not admitted
    - Home Health

### ODH calculation

Rate = (N/Calc PD) x 10,000 **Report the numerator and denominator for each calendar quarter (note: the rate will be calculated for you)**

## Healthcare Employee Influenza Vaccination Measure

### Population Definition

- Count all employees who received a vaccination regardless of where they received the vaccination (i.e., physician's office or clinic) and regardless of where they work in the facility.
- Count only paid employees as of March 31<sup>st</sup> each year.
  - To ensure that employees counted in the numerator are also represented in the eligible denominator, count as follows. Remove from the numerator any employee that received the influenza vaccination during the period of review, but was not employed as of March 31<sup>st</sup>. This ensures a 1:1 relationship between those vaccinated and those eligible to be vaccinated.

Note: Your numerator should not be larger than your denominator.

### Numerator

Number of paid employees receiving either nasal spray or shot of influenza vaccine from September 1 to March 31.

### Denominator

Total number of paid hospital employees that were employed as of March 31, including those employees who declined to receive the vaccination.

### ODH calculation

Rate =  $(N/D) \times 100$  **Report one numerator and denominator for the entire flu season (September 1 through March 31). This measure will only be reported to ODH in October of each year.**

## Hand Hygiene Questions

No data collection is needed for the following section. Simply answer the questions per your hospital's policies. The following questions will be displayed in the electronic Hospital Measure Reporting application and will allow you to choose only one answer. Answer each question based on what was in place as of the last day of the reporting period.

1. Does your hospital have a program to improve hand hygiene practices?  
Yes / No / Under development
2. Does your hospital teach principles of hand hygiene and proper use of gloves to all clinical staff upon hire?  
Yes / No
3. Does your hospital monitor and provide feedback to clinical staff regarding their hand hygiene practices?  
Yes, both / Partial, monitor only / No
4. In your hospital's clinical settings, are alcohol-based hand-rubs available for use at the point of care?  
Yes / No
5. In your hospital's clinical settings, are gloves available for use at the point of care?  
Yes / No
6. Does your hospital prohibit the wearing of artificial nails by direct-care providers?  
Yes / No

## Infection Control Staffing Questions

No data collection is needed for the following section. Simply answer the questions per your hospital's policies. The following questions will be displayed in the electronic Hospital Measure Reporting application and allow you to choose only one answer. Answer each question based on what was in place as of the last day of the reporting period.

1. Does your hospital employ a qualified Infection Control Professional (ICP)?  
Yes / No
2. Does your hospital employ an Infection Control Professional (ICP) who is board-certified in infection control (CIC)? To qualify for the certification examination, one must have a baccalaureate degree OR current license as a medical technologist, clinical laboratory scientist, physician or registered nurse AND a minimum of two years of experience in infection control practice within the most current five year period and with a minimum of 800 hours worked prior to the date of the examination.  
Yes / No
3. Does your hospital have a board-certified Infectious Disease Physician either on staff or available for consult?  
Yes / No

## Perinatal/Pregnancy Measures

The three measures below (Infants under 1500g, Antenatal Steroids and Cesarean Rate) will be calculated by the Ohio Department of Health from the Vital Statistics birth record information. Your hospital should coordinate internally with your obstetric newborn service and your birth records personnel to ensure the data calculated are accurate. If the data pre-populated in the Hospital Measure Reporting application **are** not accurate, you can override it.

### Infants Under 1500g Delivered



#### Description of Measure:

The number per 100 livebirths of <1500g infants delivered at hospitals (all levels should report)

#### Numerator

Liveborn infants from the denominator with birthweight <1500g at the given birth hospital

#### Denominator

All livebirths at or beyond 24 weeks gestation at the given birth hospital (**Include any infant ≥ 24w+0d gestation**)

#### ODH calculation using birth record data:

$100 * (\#births \text{ where } BWG < 1,500 \text{ g and } OWGEST \geq 24 \text{ weeks}) / (\#births \text{ where } OWGEST \geq 24 \text{ weeks})$

BWG = **birthweight**

OWGEST = Obstetric estimate of gestation

## Antenatal Steroids

### Description of Measure:

Mothers receiving antenatal steroids during pregnancy at any time prior to delivery of a preterm infant.

#### Numerator

Number of mothers from the denominator receiving antenatal steroids (corticosteroids administered IM) during pregnancy at any time prior to delivery.

#### Denominator

Total number of mothers who delivered preterm infants (24-32 weeks with preterm premature rupture of membranes, or 24-34 weeks with intact membranes).

**Note: Include any mother who delivered between 24w+0d and 31w+6d with PROM and 24w+0d and 33w+6d with Intact membranes**

#### ODH calculation using birth record data:

$$100 * \left[ \frac{\text{\#births where STER='Y' and } \{ (24 \leq \text{OWGEST} \leq 31 \text{ and PROM='Y'}) \text{ or } (24 \leq \text{OWGEST} \leq 33 \text{ and PROM='N'}) \}}{\{ (24 \leq \text{OWGEST} \leq 31 \text{ and PROM='Y'}) \text{ or } (24 \leq \text{OWGEST} \leq 33 \text{ and PROM='N'}) \}} \right]$$

(Mothers delivering multiples are counted as one delivery)

OWGEST = Obstetric estimate of gestation

STER = Characteristics of labor-steroids

PROM = Onset of labor-premature rupture of membranes

## Cesarean Rate

### Description of Measure:

Nulliparous women with a term, singleton baby in a vertex position delivered by cesarean section

#### Numerator

That proportion of the denominator that had a cesarean birth.

#### Denominator

Livebirths at or beyond 37.0 weeks gestation that are having their first delivery and are singleton (no twins or beyond) and are vertex presentation (no breech or transverse positions).

#### Exclude:

Patients with abnormal presentation, preterm, fetal death, multiple gestation diagnosis codes, or breech procedure codes.

#### ODH calculation using birth record data:

$$100 * \left[ \frac{\text{\#births where OWGEST} \geq 37 \text{ and PLUR}=1 \text{ and (PLBL}=0 \text{ and PLBD}=0) \text{ and ROUT}=4 \text{ and NVPR}='N'}{[\text{\#births where OWGEST} \geq 37 \text{ and PLUR}=1 \text{ and (PLBL}=0 \text{ and PLBD}=01) \text{ and NVPR}='N']} \right]$$

OWGEST = Obstetric estimate of gestation

PLUR = Plurality

PLBL = Previous live births now living

PLBD = Previous live births now dead

ROUT = Method of delivery (4=cesarean)

NVPR = Non-vertex presentation

**Note: If you have Ohio Perinatal Quality Collaborative (OPQC) data available to you, do not use this data for reporting! The OPQC definition includes 36 to 38 weeks gestation and the exclusion criteria are not as inclusive as TJC definition.**

**Description of Measure:**

Patients with elective vaginal deliveries or elective cesarean sections at  $\geq 37$  and  $< 39$  weeks of gestation completed.

For complete specifications refer to the links below. Hospitals should use the version of the specifications that were in place when the data was collected for the measure.

Patient discharges 1/1/12 – 6/30/12 (1Q12 - 2Q12) <https://manual.jointcommission.org/releases/archive/TJC2012A/MIF0166.html>

Patient discharges 7/1/12 – 12/31/12 (3Q12 - 4Q12) <https://manual.jointcommission.org/releases/TJC2012B/MIF0166.html>

**Numerator**

Patients from the denominator with elective deliveries

**Included Populations:** *ICD-9-CM Principal Procedure Code or ICD-9-CM Other Procedure Codes* for one or more of the following:

Medical induction of labor as defined:

73.01	Induction of labor by artificial rupture of membranes	INDUCT LABOR-RUPT MEMB
73.1	Other surgical induction of labor	SURG INDUCT LABOR NEC
73.4	Medical induction of labor	MEDICAL INDUCTION LABOR

Cesarean section while not in *Active Labor* or experiencing *Spontaneous Rupture of Membranes* as defined:

74.0	Classical cesarean section	CLASSICAL C-SECTION
74.1	Low cervical cesarean section	LOW CERVICAL C-SECTION
74.2	Extraperitoneal cesarean section	EXTRAPERITONEAL C-SECTION
74.4	Cesarean section of other specified type	CESAREAN SECTION NEC
74.99	Other cesarean section of unspecified type	CESAREAN SECTION NOS

**Denominator**

Patients delivering newborns with  $\geq 37.0$  (37w+0d) and  $< 39.0$  (38w+6d) weeks of gestation completed

**Excluded Populations:** *ICD-9-CM Principal Diagnosis Code or ICD-9-CM Other Diagnosis Codes* for conditions possibly justifying elective delivery prior to 39 weeks gestation as defined in Appendix A, Table 11.07 (see links below)

- Less than 8 years of age
- Greater than or equal to 65 years of age
- Length of stay  $> 120$  days
- Enrolled in clinical trials

Elective means: any optional or medically unnecessary delivery. Elective/scheduled is a birth by induction or cesarean that is scheduled for the convenience of the woman or her doctor. If the reason for the delivery is not in the listing of exclusions, then for the purpose for this data reporting, it is considered to be elective.

**Appendix A, Table Number 11.07- Conditions Justifying Elective Delivery**

Hospitals should use the version of the specifications that were in place when the data was collected for this.

<https://manual.jointcommission.org/releases/archive/TJC2011A/AppendixATJC.html>.

## Incidence of Episiotomy

### Description of Measure:

Number of vaginal deliveries with episiotomy procedures performed.

#### Numerator

Number of episiotomy procedures (ICD-9 procedure codes 72.1, 72.21, 72.31, 72.71, 73.6) performed – (minus) cases with an ICD-9-CM code of shoulder dystocia.

72.1	Low forceps operation with episiotomy	72.71	Vacuum extraction with episiotomy
72.21	Mid forceps operation with episiotomy	73.6	Episiotomy
72.31	High forceps operation with episiotomy		

#### Denominator

Number of vaginal deliveries

### Exclude ICD-9 codes:

Deliveries coded with shoulder dystocia ( ICD-9 code 660.41 or 660.43)

660.41 Shoulder (girdle) dystocia with delivery  
660.43 Shoulder (girdle) dystocia antepartum

## Pediatric Measures

For details on [Relievers for Inpatient Asthma \(age 2-17\)](#) and [Systemic Corticosteroids for Inpatient Asthma \(age 2-17\)](#) and see section “Centers for Medicare and Medicaid Services and Joint Commission Measures” on page 13 of this document.

### Prophylactic Antibiotic Received within One Hour Prior to Surgical Incision

#### Description of Measure:

Percentage of Patient Trips to the Operating Room with Prophylactic Antibiotics Initiated 0-60 Minutes Prior to Incision; 0-120 minutes for antimicrobials that require a longer infusion time.

Use the neurosurgical, orthopedic, and cardiothoracic procedures and corresponding CPT and ICD-9-CM procedure codes based on the CDC-NHSN reporting categories: VSHN, FUSN, and CARD. These specific codes can be found on pages 36-41 of this manual.

#### Population Definition

- Trips to the operating room for patients who receive surgical procedures that appear on the designated list.
- Trips to the operating room for patients < 18 years of age, as of the date the designated surgical procedures are performed.

#### Exclude:

- Trips to the operating room for patients for whom clinical assessment suggests that prophylactic antibiotic timing does not need to be measured.

Examples:

1. Clinical assessment confirms that additional antibiotic prophylaxis within 0-60 minutes (0-120 minutes for antimicrobials that require a longer infusion time) is not required.
2. Suspected or diagnosed infection at the site of the surgical procedure (e.g. revision of an infected ventriculo-peritoneal shunt).
3. Clinical decision to withhold prophylactic antibiotics is made until a culture is obtained, as these antibiotics may falsely sterilize the culture.

#### Numerator

Number of patient trips to the operating room for designated surgical procedures where required prophylactic antibiotics were initiated 0-60 minutes prior to incision (0-120 minutes for those antimicrobials that require a longer infusion time). The numerator is the sum of antibiotic timing successes across all three procedure categories (neurosurgical, orthopedic, cardiothoracic).

#### Denominator

Number of patient trips to the operating room for designated surgical procedures performed during the applicable reporting period in patients < 18 years of age, as of the date the procedures are performed. The denominator is the sum of patient trips to the operating room for procedures from Attachment A across all three procedure categories (neurosurgical, orthopedic, cardiothoracic).

**Special Instructions:** A patient trip to the operating room is counted only **once**, regardless of the number of procedures performed.

#### Notes:

- Instances where required prophylactic antibiotics were not administered are counted the same as not initiated 0-60 minutes prior to incision (0-120 minutes for those antimicrobials that require a longer infusion time).
- Appropriate timing of antibiotic re-dosing during surgical procedures is not addressed.
- Appropriate antibiotic selection is not addressed.
- Adjusting data for differences in case mix, volumes, or patient severity across reporting hospitals is not required for this measure.

Rate = (Numerator/Denominator) x 100 **Report the numerator and denominator for each calendar quarter**

## Surgical Site Infection Event (VSHN, FUSN, CARD)

### Description of Measure:

Surgical Site Infections (SSI) per 100 Patient Trips to the Operating Room

The neurosurgical, orthopedic, and cardiothoracic procedures and corresponding CPT and ICD-9-CM procedure codes are based on the CDC-NHSN reporting categories: VSHN, FUSN, and CARD. **These specific codes can be found on pages 36-41 of this manual.**

### Population Definition

- Trips to the operating room for patients who receive surgical procedures that appear on the designated list.
- Trips to the operating room for patients < 18 years of age, as of the date the designated surgical procedures are performed.

### Exclude:

- Trips to the operating room for patients who developed a surgical site infection related to the original procedure (SSI has already been counted in the numerator).

### Numerator

Number of SSIs (reported as one number) in the following CDC/NHSN categories related to designated surgical procedures. A separate numerator is reported for each procedure type (neurosurgical, orthopedic, cardiothoracic). Count all superficial incisional, deep incisional and organ space.

### Denominator

Include superficial incisional, deep incisional and organ/space.

Number of patient trips to the operating room for designated surgical procedures during the applicable reporting period in patients < 18 years of age, as of the date the procedures are performed. A separate denominator is reported for each procedure type (neurosurgical, orthopedic, cardiothoracic).

**Special Instructions:** A patient trip to the operating room is counted only **once**, regardless of the number of procedures performed. Patient trips to the operating room (during the same admission) that occur in the same day as the original operative incision for reasons related to the original procedure are counted only **once**.

### Data Collection/Reporting

- CDC-defined surveillance periods for identifying SSIs:
  - 30 days for non-implanted devices.
  - 365 days for implanted devices.
- Minimum required scope of surveillance to identify SSIs includes hospital-based encounters (e.g. inpatient, ED/urgent care, hospital-based outpatient clinics).
- SSI rate is reported separately for each of the following surgical procedure categories: neurosurgical, orthopedic, and cardiothoracic.
- SSIs are assigned to the month when the attributable surgical procedures were performed.
- Due to challenges communicating information across hospitals, should the attributable procedure be performed at a hospital other than the hospital where the SSI was identified, the following guidelines apply:
- Hospital performing attributable procedure: add patient trip to the operating room to the denominator, even if unable to add the related SSI to the numerator (due to lack of awareness that the SSI has occurred); add SSI to the numerator if aware that the SSI has been identified by another hospital.
- Hospital identifying the SSI: exclude SSI from the numerator since the patient trip to the operating room where the attributable procedure was performed is within the denominator of a different hospital. (Note: hospital identifying the SSI should contact the infection control department of the hospital that performed the attributable procedure; cross-hospital communication of patient information should comply with legal, legislative, and regulatory requirements.)

## Notes

NHSN SSI risk-adjustment methodologies will not be utilized. NHSN algorithm based on operation duration, wound class, and ASA classification has not been validated for pediatric populations. As pediatric-specific SSI prevalence rates for the designated surgical procedures are not available from evidence-based literature, the alternative NHSN methodology based on “observed vs. expected” cannot be applied.

Rate = (Numerator/Denominator) x 100 **Report the numerator and denominator for each calendar quarter**

**Pediatric Procedure Codes for Prophylactic Antibiotic Timing and Surgical Site Infection Event (VSHN, FUSN, Card)**

<b>VSHN – Primary Ventricular Shunt</b>		
<b>Procedure Name</b>	<b>CPT Code(s)</b>	<b>ICD-9-CM Procedure Code(s)</b>
Creation of shunt; subarachnoid subdural, -atrial, -jugular, -auricular	62190	02.32
Creation of shunt; subarachnoid subdural, -peritoneal, -pleural, -other terminus	62192	02.33, 02.34, 02.35
Creation of shunt; ventriculo-atrial, -jugular, -auricular	62220	02.31, 02.32
Creation of shunt; ventriculo-peritoneal, -pleural, other terminus	62223	02.33, 02.34, 02.35
Creation of shunt, Scope Approach	62160, 62220, 62223	02.31, 02.32, 02.33, 02.34

Reference: The National Healthcare Safety Network (NHSN) Patient Safety Component Manual (*with deviations*)

**Exclude:**

- Removal/revision shunts – CPT 62194, 62230, 62256, 62258 and ICD-9-CM 02.42 and 02.43
- Insertion or replacement of external ventricular drain (EVD) – CPT 61020, 61026 and ICD-9-CM 02.21
- Intracranial ventricular shunt or anastomosis – CPT 62220, 62223 and ICD-9-CM 02.22
- Creation of new opening in ventricle to establish drainage – CPT 62180 and ICD-9-CM 02.39 and 02.2
- Incision of peritoneum – CPT 49999 and ICD-9-CM 54.95
- Trips to the operating room for any patient with “hardware” present at the time of the surgery
- Trips to the operating room for patients with “hardware” in the central nervous system that was removed ≤ 365 days from the date of the present procedure. “Hardware” will be defined as any foreign body remaining/indwelling in the central nervous system. This “hardware” can include, but is not limited to, external ventricular drain (EVD).

**Include:**

- Extracranial ventricular shunts (primary shunts only; including revision and removal ) – CPT 62160, 62190, 62192, 62223 and 62220 and ICD-9-CM 02.31-02.35

The complete NHSN manual can be found at <http://www.cdc.gov/nhsn/settings.html>.

SSI component only can be found at <http://www.cdc.gov/nhsn/PDFs/PSCManual/9pscSSICurrent.pdf>

**FUSN – Spinal Fusion**

<b>Procedure Name</b>	<b>CPT Codes</b>	<b>ICD-9-CM Procedure Codes</b>
Spine Anterior Fusion with Instrumentation and Bone Graft	20930, 20936, 20937, 22808, 22810, 22812, 22845, 22846, 22847, 22851, 22899	<b>Cervical</b> - 81.01, 81.02
		<b>Dorsal</b> - 81.04
		<b>Lumbar</b> - 81.06, 81.07
Spine Anterior Posterior Fusion with Instrumentation and Bone Graft	20930, 20936, 20937, 22800, 22802, 22804, 22808, 22810, 22812, 22842, 22843, 22844	<b>Cervical</b> - 81.01, 81.02, 81.03
		<b>Dorsal</b> - 81.04, 81.05
		<b>Lumbar</b> - 81.06, 81.07, 81.08
Spine Anterior Trap Door, Posterior Fusion with Instrumentation and Bone Graft	20930, 20936, 20937, 22800, 22802, 22804, 22808, 22810, 22812, 22842, 22843, 22844, 22851, 22899	<b>Cervical</b> - 81.01, 81.02, 81.03
		<b>Dorsal</b> - 81.04, 81.05
		<b>Lumbar</b> - 81.06, 81.07, 81.08
Spine Cervical Anterior Decompression with Fusion and Bone Graft	20930, 20936, 20937, 22800	81.01, 81.02
Spine Cervical Posterior Fusion with Instrumentation and Bone Graft	20930, 20936, 20937, 22800, 22842, 22851, 22899	81.03
Spine Posterior Fusion with Growing Rod Instrumentation and Bone Graft	20930, 20936, 20937, 22800, 22844, 22851, 22899	<b>Cervical</b> - 81.01, 81.03
		<b>Dorsal</b> - 81.05
		<b>Lumbar</b> - 81.07, 81.08
Spine Posterior Fusion with Instrumentation and Bone Graft	20930, 20936, 20937, 22800, 22802, 22804, 22842, 22843, 22844, 22851, 22899	<b>Cervical</b> - 81.03
		<b>Dorsal</b> - 81.05
		<b>Lumbar</b> - 81.07, 81.08
Spine Posterior Fusion with Instrumentation and Bone Graft and Costoplasty	20930, 20936, 20937, 22800, 22802, 22804, 22842, 22843, 22844, 22851, 22899, 32905	<b>Cervical</b> - 81.03
		<b>Dorsal</b> - 81.05
		<b>Lumbar</b> - 81.07, 81.08
Spine Posterior Fusion with Unit Rod and Bone Graft	20663, 22808, 22810, 22812, 22851, 22899	<b>Cervical</b> - 81.03
		<b>Dorsal</b> - 81.05
		<b>Lumbar</b> - 81.08
Spine Vats Anterior Release with Simultaneous Posterior Fusion with Instrumentation and Bone Graft	22802, 22810, 22812, 22851, 22899	<b>Cervical</b> - 81.02, 81.03
		<b>Dorsal</b> - 81.04, 81.05
		<b>Lumbar</b> - 81.06, 81.07, 81.08
Spine Vats Anterior Release and Posterior Spinal Fusion with Instrumentation and Bone Graft	20930, 20936, 20937, 22800, 22802, 22810, 22812, 22842, 22843, 22844, 22851, 22899	<b>Cervical</b> - 81.02, 81.03
		<b>Dorsal</b> - 81.04, 81.05
		<b>Lumbar</b> - 81.06, 81.07, 81.08
Spondylolisthesis Repair with Instrumentation and Bone Graft	20930, 20936, 20937, 22800, 22802, 22804, 22842, 22843, 22844, 22851, 22899	<b>Cervical</b> - 81.03
		<b>Dorsal</b> - 81.04
		<b>Lumbar</b> - 81.06, 81.07

CARD – Cardiac Surgery

Procedure Name	CPT Code(s)	ICD-9-CM Procedure Code(s)
Aortic stenosis repair, Subvalvar	33415	35.35, 37.11
Aortic stenosis repair, Subvalvar, Aortoventriculoplasty	33412	35.21, 35.22, 35.33
Aortic stenosis repair, Subvalvar, Apical-aortic conduit	33404	35.11
Aortic stenosis repair, Subvalvar, Myomectomy	33416	35.35, 37.11
Aortic stenosis repair, Supraaortic	33417	35.11
AP window repair	33814	35.98
Arrhythmia - Atrial, Surgical ablation, Accessory connection ablation, Anteroseptal dissection and/or cryoablation, Epicardial approach, With CPB	33251	37.33
Arrhythmia - Atrial, Surgical ablation, Accessory connection ablation, Anteroseptal dissection and/or cryoablation, Epicardial approach, With or without CPB	33250	37.33
Arterial switch procedure (Jatene procedure)	33778	35.84
Arterial switch procedure (Jatene procedure) + VSD repair, Staged procedure, With preceding PA banding	33780	35.84
Arterial switch procedure (Jatene procedure), Staged procedure	33779	35.84
ASD creation, Atrial septectomy, Without CPB	33737	35.42
ASD repair, Primum	33660	35.51, 35.63, 35.73
ASD repair, Secundum, Patch	33641	35.51, 35.61, 35.71
ASD repair, Sinus venosus, Warden (SVC sewn to atrial appendage)	33645	35.51, 35.61, 35.71
Atrial septal fenestration	33736	35.42
Atrial switch procedure	33774	35.91
Atrial switch procedure, Mustard procedure, With PA Debanding	33775	35.91
Atrial switch procedure, Mustard procedure, With subpulmonic obstruction repair	33777	35.91
Atrial switch procedure, Mustard procedure, With VSD closure	33776	35.91
AVC (AVSD) repair	33670	35.54, 35.63, 35.73
AVC (AVSD) repair, Intermediate (transitional)	33665	35.51, 35.63, 35.73
AVC (AVSD) repair, Partial (incomplete) (PAVSD), Without cleft MV repair	33660	35.51, 35.63, 35.73
Cardiac tumor, Biopsy, Extracardiac tumor, With Cardiopulmonary Bypass (CPB)	33130	37.33
Cardiac tumor, Biopsy, Intracardiac and extracardiac tumor,	33120	37.33

With CPB		
Cardiac wound, suture repair, with bypass	33305	35.31, 35.32, 37.49
Conduit placement	33608	35.72, 35.82
Congenitally corrected TGA repair, Atrial switch and ASO (double switch)	33778	35.84
Cor triatriatum repair	33732	35.12
DCRV repair	33476	35.13, 35.34
DOLV Repair	33611	35.72
DORV repair, Arterial switch operation with tunneling of VSD to neo-aortic valve	33778	35.84
DORV repair, Fontan repair	33617	35.94
DORV repair, Intraventricular tunnel repair, With pulmonary outflow tract obstruction (POTO) repair	33612	35.72
Ebstein's anomaly repair	33468	35.14
Fontan	33617	35.94
Fontan - Norwood Stage 3	33615	35.94
Interrupted aortic arch (IAA) repair, Staged approach, Stage II (VSD closure and PAB removal)	33688	35.53, 35.62, 35.72
LVOT reconstruction	33414	35.35, 35.93, 35.98
Palliation, Shunt, Ligation and takedown	33924	35.81
PAPVC repair	33645	35.50, 35.51, 35.60, 35.61, 35.70, 35.71
Pericardial disease, Pericardiectomy, Median sternotomy with cardiopulmonary bypass	33031	37.31
Rastelli procedure	33608	35.72, 35.82
Rastelli procedure, Pulmonary atresia - VSD	33920	35.13
Rastelli procedure, TGA - VSD - LVOTO	33770	35.84
Rastelli procedure, With VSD enlargement	33771	35.84
Ross procedure	33413	35.21, 35.25, 35.33
RVOT reconstruction, Conduit	33475	35.25, 35.26
RVOT reconstruction, Patch	33478	35.13, 35.34
TAPVC repair	33730	35.82
TOF repair	33692	35.81
TOF repair, Right ventricle-pulmonary artery conduit	33697	35.81, 35.92
TOF repair, Ventriculotomy, Transannular patch	33694	35.81
TOF/AVC (AVSD) repair	33670	35.54, 35.63, 35.73
Trauma, Exploratory cardiomy, Foreign body removal, With CPB	33315	37.11

Truncus arteriosus repair	33786	35.83
Valsalva aneurysm, repair of sinus	33720	35.39
Valve closure, Aortic	33602	35.11, 35.12, 35.13, 35.14
Valve closure, Mitral	33600	35.11, 35.12, 35.13, 35.14
Valve closure, Pulmonic	33602	35.11, 35.12, 35.13, 35.14
Valve closure, Tricuspid	33600	35.11, 35.12, 35.13, 35.14
Valve excision (Valvectomy), Tricuspid (without replacement)	33460	35.14, 35.27, 35.28
Valve procedure, Reoperative	33530	35.99
Valve replacement, Aortic (AVR)	33405	35.21, 35.22
Valve replacement, Aortic (AVR), Homograft	33406	35.21, 35.22
Valve replacement, Aortic (AVR), Pulmonary autograft (Ross procedure)	33413	35.21, 35.25, 35.26, 35.33
Valve replacement, Aortic (AVR), Stentless tissue valve	33410	35.21, 35.22
Valve replacement, Aortic (AVR)-modifier, With annular enlargement	33411	35.21, 35.22, 35.33
Valve replacement, Mitral (MVR)	33430	35.23, 35.24
Valve replacement, Tricuspid (TVR)	33465	35.27, 35.28
Valvuloplasty, Aortic	33400	35.11
Valvuloplasty, Aortic, Valvotomy, Surgical, Inflow occlusion	33401	35.11, 35.01
Valvuloplasty, Aortic, Valvotomy, Surgical, Transventricular dilation, With CPB	33403	35.11
Valvuloplasty, Mitral	33425	35.12, 35.23, 35.24
Valvuloplasty, Mitral, Chordal reconstruction	33427	35.12, 35.23, 35.24
Valvuloplasty, Mitral, Commissurotomy, Ring	33426	35.12, 35.23, 35.24
Valvuloplasty, Mitral, Mitral valvotomy, Open heart	33422	35.02, 35.12
Valvuloplasty, Mitral, Supravalvar mitral ring repair	33732	35.12
Valvuloplasty, Prosthetic valve	33496	35.95
Valvuloplasty, Pulmonic, Valvotomy, Surgical, Inflow occlusion	33472	35.13
Valvuloplasty, Pulmonic, Valvotomy, Surgical, With CPB	33474	35.13
Valvuloplasty, Tricuspid	33463	35.14, 35.27, 35.28, 35.04
Valvuloplasty, Tricuspid, With annuloplasty ring	33464	35.14, 35.27, 35.28, 35.04
Ventricular septal fenestration	33610	35.42
VSD repair	33681	35.53, 35.62, 35.72
VSD repair + ASD repair	33647	35.61, 35.62, 35.71, 35.72
VSD repair + PA Debanding	33688	35.53, 35.62, 35.72
VSD repair, Post-infarct	33545	35.72

VSD repair, with infundibular resection	33684	35.03, 35.34, 35.62
Excision of aneurysm of heart	33542	37.32
Partial ventriculectomy	33999	37.35
Implantation of prosthetic cardiac support device around heart	33999	37.41
Excision or destruction of left atrial appendage (LAA)	33257 limited 33259 extensive	37.36
Pericardiotomy	33020	37.12
Excision or destruction of other lesion or tissue of heart, thoracoscopic approach	33130	37.37
Implantation or insertion or biventricular external heart assist system*	33976	37.60

35.00, 35.10, 35.20, 35.50, 35.60, 35.70, 37.10 = Unspecified but eligible for denominator.

Reference: The National Healthcare Safety Network (NHSN) Patient Safety Component Manual

\*Note: If the incision is not entirely closed at procedure's end (i.e., if wires or tubes extrude through the incision) then the procedure **does not** meet the criteria of an NHSN operative procedure. Consistent with NHSN definitions, open and closure in the operating room is inclusion criteria for all procedures on the CARD list.

**Include:**

- Open chest procedures on the valves or septum of heart. Applicable ICD-9-CM procedure codes: 35.00 - 35.04, 35.10 - 35.14, 35.20 – 35.28, 35.31 -35.35, 35.39, 35.42, 35.50 - 35.51, 35.53 - 35.54, 35.60 - 35.63, 35.70 - 35.73, 35.81 - 35.84, 35.91 - 35.95, 35.98 - 35.99, 37.10 - 37.12, 37.31 - 37.33, 37.35 - 37.37, 37.41, 37.49, 37.60\*

**Exclude:**

- Coronary artery bypass graft, surgery on vessels, heart transplant or pacemaker implant
- Transapical replacement of aortic valve – CPT 0257T and ICD-9-CM 35.06
- Transapical replacement of pulmonary valve – CPT 39999 (code is unspecified) and ICD-9-CM 35.08

The Complete NHSN Manual can be viewed at <http://www.cdc.gov/nhsn/settings.html>.

SSI component only can be viewed at <http://www.cdc.gov/nhsn/PDFs/PSCManual/9pscSSIcurrent.pdf>

## Catheter-Associated Bloodstream Infections

**Note: CA-BSI must be reported by all hospitals with patients < 18 with central lines and who are served in an ICU setting (NICU excluded).**

### Description of Measure:

Laboratory-Confirmed Catheter-Associated Bloodstream Infections (CA-BSI) per 1,000 Catheter Days for ICU Patients

### Population Definition

- All patients < 18 years of age on date of admission or re-admission to ICU setting who have a central venous catheter.
- Includes patients in applicable ICU settings with central venous catheters regardless of place of insertion (e.g., tunneled/implanted central lines inserted in OR, PICC lines inserted in interventional radiology).
- Includes all ICU settings, *except* NICUs.
  - Includes immunocompromised patients.
- Includes the following catheter types:
  - Tunneled/implanted central line (e.g., Hickman, Broviac, Mediport).
  - Percutaneous central line (e.g., central venous catheter, subclavian-inserted central catheter).
  - Peripherally-inserted central catheter (PICC): must be threaded in or near heart or great vessel to qualify as “central line.”
  - Umbilical venous catheter.
- NHSN definition of central line: intravascular catheter that terminates at or close to the heart or in one of the great vessels which is used for infusion, withdrawal of blood, or hemodynamic monitoring.
- Patients with an existing central venous catheter where a CA-BSI develops within 48 hours after inter- or intra-hospital transfer from an ICU within the hospital reporting this measure to another clinical setting (e.g., inpatient unit, ICU). (Note: the hospital reporting this measure should capture catheter days for these patients in their denominator, and the CA-BSIs for these patients in their numerator.)

### Exclude:

- Patients ≥ 18 years of age on date of admission or re-admission to ICU setting.
- Patients in the NICU. (Note: NICUs within children’s hospitals are part of this exclusion criteria; decisions regarding NICU-related quality measures for public reporting were deferred to the ODH Perinatal Workgroup.)
  - Catheter days for patients while in the NICU and infections attributed to the NICU are excluded.
- Intermediate care unit patients.
- Patients with an existing central venous catheter where a CA-BSI develops within 48 hours after inter- or intra-hospital transfer to an ICU within the hospital reporting this measure.

### Numerator

Number of laboratory-confirmed CA-BSIs.

### Notes:

Positive blood cultures drawn from multiple sites are counted as one infection if due to the same organism.

A laboratory-confirmed bloodstream infection (LCBI) must meet one of the following three criteria: (Note: LCBI criteria 1 and 2 may be used for patients of any age, including patients ≤ 1 year of age.) (Source: “CDC/NHSN Surveillance Definition of Health-Care Associated Infection and Criteria for Specific Types of Infections in the Acute Care Setting,” American Journal of Infection Control, 2008; 36: 309-332; National Association of Children’s Hospitals and Related Institutions CA-BSI collaborative.)

Criterion 1:

Patient has a recognized pathogen cultured from one or more blood cultures

**And**

Organism cultured from blood is not related to infection at another site.

Criterion 2:

Patient has at least one of the following signs/symptoms: fever (>38°C), chills, or hypotension

**And**

Signs/symptoms and positive laboratory results are not related to an infection at another site

**And**

Common commensal (i.e., diphtheroids [*Corynebacterium* spp. not *C. diphtheria*], *Bacillus* spp. [not *B. anthracis*], *Propionibacterium* spp., coagulase-negative staphylococci [including *S. epidermidis*], viridans group streptococci, *Aerococcus* spp., *Micrococcus* spp.) is cultured from two or more blood cultures drawn on separate occasions. (See Notes 3 and 4 in addendum.)

Criterion 3:

Patient  $\leq$  1 yr of age has at least one of the following signs or symptoms: fever (>38°C core), hypothermia (<37°C core), apnea, or bradycardia.

Note: for patients  $\leq$  1 year of age, the following temperature equivalents for fever and hypothermia may be used:

- Fever: 38°C rectal/tympanic/temporal artery=37°C oral=36°C axillary.
- Hypothermia: 37°C rectal/tympanic/temporal artery=36°C oral=35°C axillary.

**And**

Signs/symptoms and positive laboratory results are not related to an infection at another site

**And**

Common skin commensal (i.e., diphtheroids [*Corynebacterium* spp. not *C. diphtheriae*], *Bacillus* spp. [not *B. anthracis*], *Propionibacterium* spp., coagulase-negative staphylococci [including *S. epidermidis*], viridans group streptococci, *Aerococcus* spp., *Micrococcus* spp.) is cultured from two or more blood cultures drawn on separate occasions. (See Notes 3 and 4 in addendum.)

## Denominator

Number of catheter days during applicable reporting period in patients < 18 years of age on date of admission or re-admission to ICU setting.

Notes:

Definition of “catheter days”: sum of patients with 1 or more central lines (excluding arterial lines), measured at the same time each day.

Patients with multiple central lines, and central lines with multiple lumens/ports per line, are counted as 1 catheter day.

Only count line days that occurred within applicable ICU settings.

For patients transferred between ICUs within the same hospital, line days are combined across applicable ICU settings for the reporting period.

- Example: During the reporting period, a patient is admitted to the NICU, is later transferred to an applicable ICU setting, and then is transferred back to the NICU. As the NICU is not an applicable ICU setting, catheter days associated with that setting are not counted in the denominator.

## Data Collection/Reporting

- Data is reported to the ODH on a quarterly basis.
- Due to challenges communicating information across hospitals, should corresponding catheter days be recorded by a hospital other than the hospital where the CA-BSI was identified, the following guidelines apply:
  - Hospital reporting this measure: add catheter days to denominator, even if unable to add related CA-BSI to numerator (due to lack of awareness/knowledge that the CA-BSI has occurred); add the CA-BSI to numerator if aware that the CA-BSI was identified by another hospital.
  - Hospital identifying the CA-BSI: exclude the CA-BSI from numerator since corresponding catheter days are within the denominator of a different hospital.

(Note: hospital identifying the CA-BSI should contact the infection control department of hospital where patient previously received care; cross-hospital communication of patient information should comply with legal, legislative and regulatory requirements.)

## Notes

Data is not adjusted for differences in case mix, volumes, or patient severity across reporting hospitals.

Measure does not distinguish between infections due to central venous catheter insertion vs. maintenance practices.

Specimen collection considerations (Source: “CDC/NHSN Surveillance Definition of Health-Care Associated Infection and Criteria for Specific Types of Infections in the Acute Care Setting,” American Journal of Infection Control, 2008; 36: 309-332): ideally, blood culture specimens should be obtained from two to four blood draws from separate venipuncture sites (e.g., right and left antecubital veins), not through a vascular catheter. These blood draws should be performed simultaneously or over a short period of time (i.e., within a few hours). If the hospital does not currently obtain specimens using this technique, BSIs can still be reported based on the aforementioned criteria and notes listed in the addendum, but the hospital should work with appropriate personnel to facilitate better specimen collection practices for blood cultures.

## Addendum

Notes from CDC/NHSN Surveillance Definition of Health-Care Associated Infection and Criteria for Specific Types of Infections in the Acute Care Setting, American Journal of Infection Control, 2008; 36: 309-332:

1. In criterion 1, the phrase “one or more blood cultures” means that at least one bottle from a blood draw is reported by the laboratory as having grown organisms (i.e., “positive” blood culture).
2. In criterion 1, the term “recognized pathogen” does not include organisms considered common skin contaminants (see criteria 2 and 3 for list of common skin contaminants). Examples of “recognized pathogens” include: *S. aureus*, *Enterococcus* spp., *E. coli*, *Pseudomonas* spp., *Klebsiella* spp., and *Candida* spp.
3. In criteria 2 and 3, the phrase “two or more blood cultures drawn on separate occasions” means: 1) that blood from at least two blood draws were collected within two days of each other (e.g., blood draws on Monday and Tuesday or Monday and Wednesday would be acceptable for blood cultures drawn on separate occasions, but blood draws on Monday and Thursday would be too far apart to meet this criterion), and 2) that at least one bottle from each blood draw is reported by the laboratory as having grown the same common skin contaminant organism (i.e., “positive” blood culture). (See Note 4 for determining sameness of organisms.)

- a. Example: an adult patient has blood drawn at 8 a.m. and again at 8:15 a.m. of the same day. Blood from each blood draw is inoculated into two bottles and incubated (four bottles total). If one bottle from each blood draw set is positive for coagulase-negative staphylococci, this part of the criterion is met.
  - b. Example: A neonate has a blood culture drawn on Tuesday and again on Saturday, and both grow the same common skin contaminant. Because time between blood cultures exceeds the two-day period for blood draws stipulated in criteria 2 and 3, this part of the criteria is not met.
  - c. A blood culture may consist of a single bottle for a pediatric blood draw because of volume constraints. Therefore, to meet this part of the criterion, each bottle from two or more draws would have to be culture-positive for the same skin contaminant.
4. There are several issues to consider when determining sameness of organisms.
- a. If the common commensal is identified to the species level from one culture, and a companion culture is identified with only a descriptive name (e.g., to the genus level), then it is assumed that the organisms are the same. The organism identified to the species level should be reported as the infecting pathogen along with its antibiogram if available (see table below).

Culture Report	Companion Culture Report	Report as ...
<i>S. epidermidis</i>	Coagulase-negative staphylococci	<i>S. epidermidis</i>
<i>Bacillus</i> spp. (not <i>anthracis</i> )	<i>B. cereus</i>	<i>B. cereus</i>
<i>S. salivarius</i>	<i>Strep viridans</i>	<i>S. salivarius</i>

- b. If common skin contaminant organisms from the cultures are speciated but no antibiograms are done, or they are done for only one of the isolates, it is assumed that the organisms are the same.
- c. If the common skin contaminants from the cultures have antibiograms that are different for 2 or more antimicrobial agents, it is assumed that the organisms are not the same (see table below).
- d. For the purpose of NHSN antibiogram reporting, the category interpretation of intermediate (I) should not be used to distinguish whether two organisms are the same.

Organism Name	Isolate A	Isolate B	Interpret as...
<i>S. epidermidis</i>	All drugs <b>S</b>	All drugs <b>S</b>	Same
<i>S. epidermidis</i>	OX <b>R</b> CEFAZ <b>R</b>	OX <b>S</b> CEFAZ <b>S</b>	Different
<i>Corynebacterium</i> spp.	PENG <b>R</b> CIPRO <b>S</b>	PENG <b>S</b> CIPRO <b>R</b>	Different
<i>Strep viridans</i>	All drugs <b>S</b>	All drugs <b>S</b> except ERYTH <b>R</b>	Same

### ODH calculation

Rate=(Numerator/Denominator) x 1,000 **Report the numerator and denominator for each calendar quarter (Note: reported as CA-BSIs per 1,000 catheter days.)**