Centers for Medicare & Medicaid Services

Ambulatory Surgical Center Quality Reporting Program

Quality Measures Specifications Manual

Version 4.0a

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NOTICES AND DISCLAIMERS

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BACKGROUND

Quality Reporting for Ambulatory Surgical Centers

Welcome to quality reporting for Ambulatory Surgical Centers (ASCs)! This manual provides specifications for quality measures for which reporting is required to meet requirements for this pay-for-reporting program and guidance on data submission.

A quality reporting program for ASCs was finalized by the Centers for Medicare & Medicaid Services (CMS) in the Calendar Year (CY) 2012 OPPS/ASC Final Rule with Comment Period (CMS-1525-FC). Five claims-based measures (four outcome measures and one process of care measure) were adopted for the CY 2014 payment determination. For the CY 2015 payment determination, two web-based measures (surgical procedure volume and safe surgery checklist use) were adopted in addition to the five original claims-based measures for a total of seven quality measures. For the CY 2016 payment determination, the previously adopted claims-based and web-based measures were adopted, and one process of care measure was added. In the CY 2014 Final Rule, three additional web-based measures were adopted for the CY 2016 payment determination. The CY 2015 OPPS/ASC Final Rule with Comment Period implemented a dry run of an additional claims-based measure.

ASCs that do not meet program requirements which include reporting of quality measure data for the ASC Quality Reporting Program may receive a two percent reduction in their ASC annual payment update. ASC Quality Reporting Program requirements apply to all entities subject to the ASC Fee Schedule (ASCFS); this includes separately identifiable entities certified as an ASC by Medicare and Indian Health Service hospitals paid as ASCs under the ASCFS. The definition of an ASC and what entities are paid under Medicare's ASCFS can be found in the Claims Processing Manual, Chapter 14, Section 10.1, located on the CMS website (www.cms.hhs.gov).

The below table summarizes the quality measures, reporting periods, and payment years affected.

Table 1: ASC Quality Measures, Reporting Periods, and Payment Years Affected

Measures	Reporting Period	Payments Affected
ASC-1: Patient Burn	January 1, 2015 thru December 31, 2015	CY 2017
ASC-2: Patient Fall	January 1, 2015 thru December 31, 2015	CY 2017
ASC-3: Wrong Site, Wrong Side, Wrong Patient, Wrong Procedure, Wrong Implant	January 1, 2015 thru December 31, 2015	CY 2017
ASC-4: Hospital Transfer/Admission	January 1, 2015 thru December 31, 2015	CY 2017
ASC-5: Prophylactic Intravenous (IV) Antibiotic Timing	January 1, 2015 thru December 31, 2015	CY 2017
ASC-12: Facility Seven-Day Risk-Standardized Hospital Visit Rate after Outpatient Colonoscopy	January 1, 2015 thru December 31, 2015	N/A

Table 1: ASC Quality Measures, Reporting Periods, and Payment Years Affected (continued)

Measures	Reporting Period	Payments Affected
ASC-6: Safe Surgery Checklist Use	January 1, 2015 thru August 15, 2015 (for CY 2014 encounters)	CY 2016
ASC-7: ASC Facility Volume Data on Selected ASC Surgical Procedures	January 1, 2015 thru August 15, 2015 (for CY 2014 encounters)	CY 2016
ASC-8: Influenza Vaccination Coverage among Healthcare Personnel	October 1, 2014 thru March 31, 2015 (Data Submission deadline May 15, 2015	CY 2016
ASC-9: Endoscopy/Polyp Surveillance: Appropriate Follow-up Interval for Normal Colonoscopy in Average Risk Patients	January 1, 2015 thru August 15, 2015 (for April 1 through December 31, 2014 encounters)	CY 2016
ASC-10: Endoscopy/Polyp Surveillance: Colonoscopy Interval for Patients with a History of Adenomatous Polyps - Avoidance of Inappropriate Use	January 1, 2015 thru August 15, 2015 (for April 1 through December 31, 2014 encounters)	CY 2016
ASC-11: Cataracts: Improvement in Patient's Visual Function within 90 Days Following Cataract Surgery	January 1, 2015 thru December 31, 2015 (Data Submission TBD)	Voluntary

The establishment of a quality measure reporting program for services provided by ambulatory surgical centers was authorized under the Medicare Improvements and Extension Act of 2006 under Title I of the Tax Relief and Health Care Act of 2006 (Pub. L. 109-432).

Data Collection and Submission

Data for claims-based measures included in this specifications manual are to be reported for Medicare Part B fee-for-service (FFS) patients admitted to the ASC during required reporting periods (see Table 1). Medicare Part B FFS patients include Medicare Railroad Retirement Board patients and Medicare Secondary payer patients. Medicare Advantage patients are not included for reporting purposes.

Reporting on claims-based measures began October 1, 2012, for Medicare Part B FFS patients where Medicare was the primary payer. Reporting on claims-based measures where Medicare is the primary or secondary payer began on January 1, 2013. Reporting for Medicare secondary payer claims was delayed until January 2013 due to the timing of commercial payer system code updates.

For claims-based measures, the reporting period refers to dates of service, not to any other date associated with claims processing such as the claim submission date. For example, if a service was provided on December 30, 2012, with claim submission on January 1, 2013, this claim would not be included in the CY 2015 payment decision data because the service date was prior to the reporting period. However, this claim would be included in the CY 2014 payment decision data if it was submitted by the submission deadline in April 2013.

Data for web-based measures relate to ***all*** ASC patients (Medicare and non-Medicare).

Claims-Based Measures

ASCs are to submit information on the five claims-based measures using Quality Data Codes (QDCs) entered on their claims submitted using the CMS-1500 or associated electronic dataset. QDCs are specified CPT Category II codes or Level II G-codes that describe the clinical action evaluated by the measure. Clinical actions can apply to more than one condition and, therefore, can also apply to more than one measure. Facilities should review all reporting instructions carefully.

The appropriate QDC(s) are to be reported for all Medicare Part B FFS patients in addition to any codes that would be standard for billing purposes (e.g., the ICD-9-CM diagnosis and Current Procedural Terminology (CPT) codes, Healthcare Common Procedure Coding System (HCPCS) Level II and CPT Category III codes for the services performed) on the ASC claim for the encounter.

Data completeness for the reporting of these measures was initially finalized in the FY 2013 IPPS/LTCH final rule with comment period for the required data collection beginning with October 1, 2012 services, and will be calculated by comparing the number of claims meeting measure specifications with the appropriate QDCs to the number of claims that would meet measure specifications without the appropriate QDCs on the submitted claim. The completeness of reporting level established in that rule remains in effect for the time period covered by this specifications manual.

Web-Based Measures

Data for web-based measures are to be submitted using a web-based tool located on the Secure QualityNet Portal at www.QualityNet.org. Data collection for web-based measures was required beginning in 2013; however, web-based measure data submission was suspended for one year in 2014 and resumes in 2015. Submission for web-based measures will begin January 1 and continue until August 15 of each calendar year.

Public Reporting

The Secretary of Health and Human Services must establish procedures to make data collected under the ASC Quality Reporting Program publicly available and to supply facilities the opportunity to review their data prior to publication. Details on the ability to withdraw and not have data publicly reported, extraordinary circumstance extensions or exemptions request process, and reconsideration request process were finalized in the FY 2013 IPPS/LTCH final rule. Proposals regarding publication of ASC Quality Reporting data will be made in future rulemaking.

THE SPECIFICATIONS MANUAL

This Specifications Manual provides measure specifications, associated QDCs with definitions, descriptive examples, references for required claims-based ASC Quality Reporting Program quality measures, and guidance for data submissions.

The claims-based ASC quality measures adopted by CMS for the ASC Quality Reporting Program were originally developed by the ASC Quality Collaboration and are the intellectual property of the ASC Quality Collaboration. Additional information about the ASC quality measures endorsed by the National Quality Forum (NQF) is available in the ASC Quality Collaboration Implementation Guide (www.ascquality.org). As developed by the ASC Quality Collaboration, these measures do not utilize a claims-based data collection mechanism nor do they use QDCs.

Note that for data being collected via a Medicare claims-based mechanism, reporting is possible only for cases where a bill with a charge greater than 0 dollars is generated; it is not possible to submit a claim for processing for quality reporting where there is no charge as such claims will be rejected by the Medicare Administrative Contractor. It is also not possible to resubmit claims for the sole purpose of correcting QDCs; such claims will be rejected by the Medicare Administrative Contractor as duplicate claims.

Information for each of the ASC Quality Reporting Program measures is displayed in the following format:

Title of Measure - Provides the reference name of the measure.
Quality Reporting Option - States whether the measure is an outcome, web-based, or a process of care measure.
Description - A brief description of what is being measured.
Numerator - The patient population experiencing the outcome or process of care being measured.
Denominator - The patient population evaluated.
Numerator Inclusions - Patients to be included in the patient population experiencing the outcome or process of care being measured.
Numerator Exclusions - Patients to be excluded from the patient population experiencing the outcome or process of care being measured.
Denominator Inclusions - Patients included in the population to be evaluated.
Denominator Exclusions - Patients to be excluded from the population to be evaluated.
Coding options - A list and definition of the QDC(s) (currently all are G codes) used to report required information for the measure.
Data Sources - The documents that typically contain the information needed to determine the numerator and denominator.
Definitions - Specific definitions for the terms included in the numerator and denominator statements.

IMPORTANT

ASC-1 through ASC-4

A QDC has been established to report that the patient did **not** experience the events for four of the five claims-based outcome measures. If this code is used, none of the other QDCs should be used for these four measures.

G8907: Patient documented **not** to have experienced any of the following events: a burn prior to discharge; a fall within the facility; wrong site, wrong side, wrong patient, wrong procedure or wrong implant event; or a hospital transfer or hospital admission upon discharge from the facility.

ASC-5

Measure ASC-5 applies to all ASCs regardless of specialty or procedure performed. CMS requires all facilities to report on the ASC-5 measure for all Medicare FFS patients, even if there is no indication for or order for perioperative antibiotics (G8918). This requirement is necessary in order to assess completeness of reporting.

IMPORTANT: For surgical patients with an order for prophylactic antibiotics, information on the fifth measure, Prophylactic IV Antibiotic Timing, will be reported separately. If the patient received the prophylactic antibiotic on time and did not experience any of the events (a burn prior to discharge; a fall within the facility; wrong site, wrong side, wrong patient, wrong procedure or wrong implant event; or a hospital transfer or hospital admission upon discharge from the facility), the code listed above (G8907) would be used **in addition to** G8916. See each measure for the list of applicable codes.

For more information on measures ASC-1 – ASC-5, see individual measure specifications in this manual.

ASC-9, ASC-10, and ASC-11

The Sampling size specifications for ASC-9, ASC-10 and ASC-11* have been established and are specified in the table below.

Table 3: Sample Size Requirements per year per ASC for Endoscopy/Polyp Surveillance (ASC-9 and ASC-10) or Cataracts (ASC-11*) measures.**

Population Per Year	**0-900**
Yearly Sample Size	63
Quarterly Sample Size	16
Monthly Sample Size	6
Population Per Year	**≥ 901**
Yearly Sample Size	96
Quarterly Sample Size	24
Monthly Sample Size	8

*Voluntary submission of data for ASC-11 will begin January 2015.
**For ASCs with fewer than 63 cases, the total population of cases is required.

Measure Title: Patient Burn

MEASURE ID #: ASC-1

QUALITY REPORTING OPTION:
Claims-based outcome measure

REPORTING MECHANISM:
Medicare Part B Fee-for-Service Claims, including for Medicare Railroad Retirement Board beneficiaries and Medicare Secondary Payer claims

REPORTING PERIOD:
The reporting period for Medicare claims begins January 1 and continues until December 31 of each calendar year.

REPORTING REQUIRED BY:
All entities paid under the Medicare Ambulatory Surgical Center Fee Schedule (ASCFS), regardless of specialty or case mix

DESCRIPTION:
The number of admissions (patients) who experience a burn prior to discharge from the ASC

DENOMINATOR:
All ASC admissions
Inclusions: All ASC admissions
Exclusions: None

NUMERATOR:
ASC admissions experiencing a burn prior to discharge
Inclusions: ASC admissions experiencing a burn prior to discharge
Exclusions: None

Numerator Quality-Data Coding Options for Reporting:
G8908: Patient documented to have received a burn prior to discharge
G8909: Patient documented **not** to have received a burn prior to discharge
G8907: Patient documented **not** to have experienced any of the following events: a burn prior to discharge; a fall within the facility; wrong site, wrong side, wrong patient, wrong procedure or wrong implant event; or a hospital transfer or hospital admission upon discharge from the facility

Note: If using code G8908 or G8909, do **not** use code G8907.

DEFINITIONS:
Admission - completion of registration after physical entry into the facility
Burn - Unintended tissue injury caused by any of the six recognized mechanisms: scalds, contact, fire, chemical, electrical or radiation (e.g. warming devices, prep solutions, electrosurgical unit or laser)
Discharge - occurs when the patient leaves the confines of the ASC

SELECTION BASIS:
There are numerous case reports in the literature regarding patient burns in the surgical and procedural setting. The diversity of the causative agents underscores the multitude of potential risks that must be properly mitigated to avoid patient burns.

The literature on burns suggests that electrosurgical burns are most common. A recent publication from the ECRI Institute (www.ecri.org) highlights the increased risk of burns with newer surgical devices that apply higher currents at longer activation times. Although electrical burns are most prevalent, other mechanisms of burn injury are frequently reported in case studies and case series. These include chemical and thermal burns.

Surgical fires are rare; however, their consequences can be grave, killing or seriously injuring patients and surgical staff. The risk of surgical fire is present whenever and wherever surgery is performed, whether in an operating room (OR), a physician's office, or an outpatient clinic.
Recognition of the diverse mechanisms by which a patient could sustain an unintentional burn in the ASC setting – scalding, contact, fire, chemical, electrical, or radiation – will allow stakeholders to develop a better understanding of the incidence of these events and further refine preventive processes.

CLINICAL RECOMMENDATION STATEMENTS:
The risk of burns related to laser use can be reduced by adherence to the guidelines published by the American National Standards Institute (ANSI) for safe use of these devices in the health care setting. Similarly, the risk of burns related to the use of electrosurgical devices can be reduced by following the electrosurgery checklist published by ECRI Institute.

The risk of surgical fires can be reduced by minimizing ignition, oxidizer, and fuel risks (the "classic triangle"). The American Society of Anesthesiologist's Practice Advisory for the Prevention and Management of Operating Room Fires seeks to prevent the occurrence of OR fires, reduce adverse outcomes associated with OR fires, and identify the elements of a fire response protocol.

These guidelines are available at: http://www.asahq.org/For-Members/Practice-Management/Practice-Parameters.aspx.

Guidance for the prevention of surgical fire has also been published by the Association of Perioperative Registered Nurses (AORN).

Additional information and resources, such as sample data collection forms and frequently asked questions (FAQs) about the measures, can be found on the ASC Quality Collaboration website at www.ascquality.org.

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Measure Title: Patient Fall

MEASURE ID #: ASC-2

QUALITY REPORTING OPTION:
Claims-based outcome measure

REPORTING MECHANISMS:
Medicare Part B Fee-for-Service Claims, including for Medicare Railroad Retirement Board beneficiaries and Medicare Secondary Payer claims

REPORTING PERIOD:
The reporting period for Medicare claims begins January 1 and continues until December 31 of each calendar year.

REPORTING REQUIRED BY:
All entities paid under the Medicare Ambulatory Surgical Center Fee Schedule (ASCFS), regardless of specialty or case mix

DESCRIPTION:
The number of admissions (patients) who experience a fall within the ASC

DENOMINATOR:
All ASC admissions

Inclusions: All ASC admissions
Exclusions: None

NUMERATOR:
ASC admissions experiencing a fall within the confines of the ASC

Inclusions: ASC admissions experiencing a fall within the confines of the ASC
Exclusions: ASC admissions experiencing a fall outside the ASC

Numerator Quality-Data Coding Options for Reporting:

G8910: Patient documented to have experienced a fall within the ASC
G8911: Patient documented **not** to have experienced a fall within the ASC
G8907: Patient documented **not** to have experienced any of the following events: a burn prior to discharge; a fall within the facility; wrong site, wrong side, wrong patient, wrong procedure or wrong implant event; or a hospital transfer or hospital admission upon discharge from the facility

Note: If using code G8910 or G8911, do **not** use code G8907.

DEFINITIONS:
Admission - completion of registration after physical entry into the facility
Fall - a sudden, uncontrolled, unintentional, downward displacement of the body to the ground or other object, excluding falls resulting from violent blows or other purposeful actions (source: National Center for Patient Safety)

SELECTION BASIS:
"Falls per 100,000 patient days" has been endorsed as a serious reportable event by the NQF. While ASCs have a relatively low incidence of adverse events in general; information regarding the incidence of patient falls is not currently available. Stakeholders have expressed an interest in the

public reporting of such adverse events. Due to the use of anxiolytics, sedatives, and anesthetic agents as adjuncts to procedures, patients undergoing outpatient surgery are at increased risk for falls.

CLINICAL RECOMMENDATION STATEMENTS:
The Agency for Healthcare Research and Quality's (AHRQ) *Prevention of Falls in Acute Care* guidelines state that patient falls can be reduced by following a four-step approach: 1) evaluating and identifying risk factors for falls in the older patient; 2) developing an appropriate plan of care for prevention; 3) performing a comprehensive evaluation of falls that occur; and 4) performing a post-fall revision of plan of care as appropriate.

Additional information and resources, such as sample data collection forms and frequently asked questions (FAQs) about the measures, can be found on the ASC Quality Collaboration website at www.ascquality.org.

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Measure Title: Wrong Site, Wrong Side, Wrong Patient, Wrong Procedure, Wrong Implant

MEASURE ID #: ASC-3

QUALITY REPORTING OPTION:
Claims-based outcome measure

REPORTING MECHANISM:
Medicare Part B Fee-for-Service Claims, including for Medicare Railroad Retirement Board beneficiaries and Medicare Secondary Payer claims

REPORTING PERIOD:
The reporting period for Medicare claims begins January 1 and continues until December 31 of each calendar year.

REPORTING REQUIRED BY:
All entities paid under the Medicare Ambulatory Surgical Center Fee Schedule (ASCFS), regardless of specialty or case mix

DESCRIPTION:
The number of admissions (patients) who experience a wrong site, side, patient, procedure or implant in the ASC

DENOMINATOR:
All ASC admissions

Inclusions: All ASC admissions
Exclusions: None

NUMERATOR:
All ASC admissions experiencing a wrong site, wrong side, wrong patient, wrong procedure or wrong implant

Inclusions: All ASC admissions experiencing a wrong site, wrong side, wrong patient, wrong procedure or wrong implant
Exclusions: None

Numerator Quality-Data Coding Options for Reporting:

G8912: Patient documented to have experienced a wrong site, wrong side, wrong patient, wrong procedure or wrong implant event

G8913: Patient documented **not** to have experienced a wrong site, wrong side, wrong patient, wrong procedure or wrong implant event

G8907: Patient documented **not** to have experienced any of the following events: a burn prior to discharge; a fall within the facility; wrong site, wrong side, wrong patient, wrong procedure or wrong implant event; or a hospital transfer or hospital admission upon discharge from the facility

Note: If using code G8912 or G8913, do **not** use code G8907.

DEFINITIONS:
Admission - completion of registration after physical entry into the facility
Wrong - not in accordance with intended site, side, patient, procedure or implant

SELECTION BASIS:
"Surgery performed on the wrong body part," "surgery performed on the wrong patient," and "wrong surgical procedure performed on a patient" have all been endorsed as serious reportable surgical events by NQF. This outcome measure serves as an indirect measure of providers' adherence to the Joint Commission's "Universal Protocol" guideline. The Joint Commission, an accreditation body, has developed a "Universal Protocol" guideline for eliminating wrong site, wrong procedure, wrong person surgery. The Universal Protocol is based on the consensus of experts and is endorsed by more than forty professional medical associations and organizations. To encompass the outcomes of all key identification verifications, the ASC Quality Collaboration's measure incorporates not only wrong site, wrong side, wrong patient and wrong procedure, but also wrong implant in its specifications.

CLINICAL RECOMMENDATION STATEMENTS:
The Joint Commission's "Universal Protocol" is based on the consensus of experts from the relevant clinical specialties and professional disciplines and is endorsed by more than 40 professional medical associations and organizations.

Additional information and resources, such as sample data collection forms and frequently asked questions (FAQs) about the measures, can be found on the ASC Quality Collaboration website at www.ascquality.org.

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Measure Title: Hospital Transfer/Admission

MEASURE ID #: ASC-4

QUALITY REPORTING OPTION:
Claims-based outcome measure

REPORTING MECHANISM:
Medicare Part B-Fee-for-Service Claims, including for Medicare Railroad Retirement Board beneficiaries and Medicare Secondary Payer claims

REPORTING PERIOD:
The reporting period for Medicare claims begins January 1 and continues until December 31 of each calendar year.

REPORTING REQUIRED BY:
All entities paid under the Medicare Ambulatory Surgical Center Fee Schedule (ASCFS), regardless of specialty or case mix

DESCRIPTION:
The number of admissions (patients) who are transferred or admitted to a hospital upon discharge from the ASC

DENOMINATOR:
All ASC admissions

Inclusions: All ASC admissions
Exclusions: None

NUMERATOR:
ASC admissions requiring a hospital transfer or hospital admission upon discharge from the ASC

Inclusions: ASC admissions requiring a hospital transfer or hospital admission upon discharge from the ASC
Exclusions: None

Numerator Quality-Data Coding Options for Reporting:

G8914: Patient documented to have experienced a hospital transfer or hospital admission upon discharge from ASC

G8915: Patient documented **not** to have experienced a hospital transfer or hospital admission upon discharge from ASC

G8907: Patient documented **not** to have experienced any of the following events: a burn prior to discharge; a fall within the facility; wrong site, wrong side, wrong patient, wrong procedure or wrong implant event; or a hospital transfer or hospital admission upon discharge from the facility

Note: If using code G8914 or G8915, do **not** use code G8907.

DEFINITIONS:
Admission - completion of registration after physical entry into the facility
Hospital Transfer/Admission - any transfer/admission from an ASC directly to an acute care hospital including hospital emergency room after the patient has been admitted to the ASC
Discharge - occurs when the patient leaves the confines of the ASC

SELECTION BASIS:
The need for transfer/admission is an unanticipated, but sometimes necessary outcome. Hospital transfers/admissions can result in unplanned cost and time burdens that must be borne by patients and payers.

Selected states have expressed an interest in the public reporting of such events. While hospital transfers and admissions undoubtedly represent good patient care when necessary, high rates may be an indicator that practice patterns or patient selection guidelines are in need of review.

CLINICAL RECOMMENDATION STATEMENTS:
No clinical practice guidelines specifically addressing transfers or admissions from ASCs to acute care hospitals are available at this time.

Additional information and resources, such as sample data collection forms and frequently asked questions (FAQs) about the measures, can be found on the ASC Quality Collaboration website at www.ascquality.org.

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Measure Title: Prophylactic Intravenous (IV) Antibiotic Timing

MEASURE ID #: ASC-5

QUALITY REPORTING OPTION:
Claims-based process measure

REPORTING MECHANISM:
Medicare Part B-Fee-for-Service Claims, including for Medicare Railroad Retirement Board beneficiaries and Medicare Secondary Payer claims

REPORTING PERIOD:
The reporting period for Medicare claims begins January 1 and continues until December 31 of each calendar year.

REPORTING REQUIRED BY:
All entities paid under the Medicare Ambulatory Surgical Center Fee Schedule (ASCFS), regardless of specialty or case mix

DESCRIPTION:
Intravenous (IV) antibiotics given for prevention of surgical site infection were administered on time

DENOMINATOR:
All ASC admissions with a preoperative order for a prophylactic IV antibiotic for prevention of surgical site infection.

Inclusions: All ASC admissions with a preoperative order for a prophylactic IV antibiotic for prevention of surgical site infection

Exclusions: ASC admissions with a preoperative order for a prophylactic IV antibiotic for prevention of infections other than surgical site infections (e.g. bacterial endocarditis); ASC admissions with a preoperative order for a prophylactic antibiotic not administered by the intravenous route

NUMERATOR:
Number of ASC admissions with an order for a prophylactic IV antibiotic for prevention of surgical site infection who received the prophylactic antibiotic on time

Inclusions: All ASC admissions with a preoperative order for a prophylactic IV antibiotic for prevention of surgical site infection

Exclusions: None

Numerator Quality-Data Coding Options for Reporting:

G8916: Patient with preoperative order for IV antibiotic surgical site infection (SSI) prophylaxis, antibiotic initiated on time

G8917: Patient with preoperative order for IV antibiotic surgical site infection (SSI) prophylaxis, antibiotic **not** initiated on time

G8918: Patient without preoperative order for IV antibiotic surgical site infection (SSI) prophylaxis

Note: G8918 is to be reported for patients with no indication for, or no order for IV antibiotic prophylaxis for surgical site infection. This does not place a case with this code in the denominator, but is necessary for calculating the completeness of reporting.

DEFINITIONS:

Admission - completion of registration after physical entry into the facility

Antibiotic administered on time - Antibiotic infusion is initiated within one hour prior to the time of the initial surgical incision or the beginning of the procedure (e.g., introduction of endoscope, insertion of needle, inflation of tourniquet) or two hours prior if vancomycin or fluoroquinolones are administered

Intravenous - Administration of a drug within a vein, including bolus, infusion or IV piggyback

Order - a written order, verbal order, standing order or standing protocol

Prophylactic antibiotic - an antibiotic prescribed with the intent of reducing the probability of an infection related to an invasive procedure. For purposes of this measure, the following antibiotics are considered prophylaxis for surgical site infections: Ampicillin/sulbactam, Aztreonam, Cefazolin, Cefmetazole, Cefotetan, Cefoxitin, Cefuroxime, Ciprofloxacin, Clindamycin, Ertapenem, Erythromycin, Gatifloxacin, Gentamicin, Levofloxacin, Metronidazole, Moxifloxacin, Neomycin and Vancomycin

SELECTION BASIS:

The CMS Surgical Infection Prevention performance measure states, "Surgical site infections occur in 2-5 percent of clean extra-abdominal surgeries and up to 20 percent of intra-abdominal surgeries. Each infection is estimated to increase a hospital stay by an average of 7 days and add over $3,000 in charges (1992 data). Patients who develop surgical site infections are 60 percent more likely to spend time in an ICU (intensive care unit), five times more likely to be readmitted to the hospital, and have twice the incidence of mortality. Despite advances in infection control practices, surgical site infections remain a substantial cause of morbidity and mortality among hospitalized patients. Studies indicate that appropriate preoperative administration of antibiotics is effective in preventing infection. Systemic and process changes that promote compliance with established guidelines and standards can decrease infectious morbidity."

There is no literature available on variation in adherence to recommended prophylactic IV antibiotic timing among ASC providers. However, variability in the accuracy of timing of administration has been demonstrated in other clinical settings.

CLINICAL RECOMMENDATION STATEMENTS:

This performance measure is aligned with current surgical infection prevention guidelines recommending that prophylactic antibiotics be administered within one hour prior to surgical incision, or within two hours prior to incision when vancomycin or fluoroquinolones are used.

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Measure Title: Safe Surgery Checklist Use

MEASURE ID #: ASC-6

QUALITY REPORTING OPTION:
Web-based measure

REPORTING MECHANISM:
Web-based tool on the Secure QualityNet Portal

REPORTING REQUIRED BY:
All separately identifiable entities certified as an ASC by Medicare, regardless of specialty or case mix

DESCRIPTION:
The use of a Safe Surgery Checklist for surgical procedures that includes safe surgery practices during each of the three critical perioperative periods: the period prior to the administration of anesthesia, the period prior to skin incision, and the period of closure of incision and prior to the patient leaving the operating room

Measure ascertains response to the following question(s):

- Does/did your facility use a safe surgery checklist based on accepted standards of practice during the designated period? Yes/No

Annual data submission period: See the timeline posted to QualityNet.org for this measure; select ASCs and then Data Submission in the drop-down menu.

Examples for Safe Surgery Practices*

First critical point (period prior to administering anesthesia)	Second critical point (period prior to skin incision)	Third critical point (period of closure of incision and prior to patient leaving the operating room)
• Verbal confirmation of patient identity • Mark surgical site • Check anesthesia machine/medication • Assessment of allergies, airway and aspiration risk	• Confirm surgical team members and roles • Confirm patient identity, procedure and surgical incision site • Administration of antibiotic prophylaxis within 60 minutes before incision • Communication among surgical team members of anticipated critical events • Display of essential imaging as appropriate	• Confirm the procedure • Complete count of surgical instruments and accessories • Identify key patient concerns for recovery and management of the patient

***Hospital safe surgery checklist items are not limited to the examples listed in this table.**

Measure Title: ASC Facility Volume Data on Selected ASC Surgical Procedures

MEASURE ID#: ASC-7

QUALITY REPORTING OPTION:
Web-based measure

REPORTING MECHANISM:
Web-based tool on the Secure QualityNet Portal

REPORTING REQUIRED BY:
All separately identifiable entities certified as an ASC by Medicare, regardless of specialty or case mix

DESCRIPTION:
The aggregate count of selected surgical procedures - Most ASC procedures fall into one of seven categories: Eye, Gastrointestinal, Genitourinary, Musculoskeletal, Nervous System, Respiratory, and Skin. The seven categories and corresponding HCPCS are listed in the table below. The procedures and codes in Table 2 were selected based on recent ASC data.

Measure ascertains response to the following question(s):

- What was the aggregate count of selected surgical procedures per category?

Annual data submission period:
See the timeline posted to QualityNet.org for this measure; select ASCs and then Data Submission in the drop-down menu.

Table 2: Categories and HCPCS for ASC-7

Organ System	CMS Procedure Category	Surgical Procedure Codes
Eye	Organ transplant (eye)	65756
	Laser procedure of eye	65855, 66761, 66821
	Glaucoma procedures	0191T, 66170, 66180, 66711, 67255
	Cataract procedures	66982, 66984
	Injection of eye	67028
	Retina, macular and posterior segment procedures	67036, 67041, 67042, 67210, 67228
	Repair of surrounding eye structures	15823, 67900, 67904, 67917, 67924
Gastrointestinal	GI endoscopy procedures	43235, 43239, 43248, 43249, 43251, 45330, 45331, 45378, 45380, 45381, 45383, 45384, 45385, 46221
	Swallowing tube (esophagus)	43450
	Hernia repair	49505
	GI screening procedures	G0105, G0121

Table 2: Categories and HCPCS for ASC-7 (continued)

Organ System	CMS Procedure Category	Surgical Procedure Codes
Genitourinary	Bladder related procedures	52000, 52005, 52204, 52281, 52310, 52332
	Prostate biopsy	55700
Musculoskeletal	Joint or muscle aspiration or injection	20610, 27096
	Removal of musculoskeletal implants	20680
	Repair of foot, toes, fingers, and wrist	26055, 28270, 28285, 28296, 28308, 29848
	Joint arthroscopy	25447, 26160, 29822, 29823, 29824, 29826, 29827, 29880, 29881
Nervous	Injection procedures in or around the spine	62310, 62311, 64450, 64479, 64480, 64483, 64484, 64490, 64491, 64492, 64493, 64494, 64495, 64520, 64633, 64634, 64635, 64636, 64640
	Device implant	63650
	Repair of foot, toes, fingers, wrist, and elbow	64415, 64718, 64721
Respiratory	Sinus procedure	30140, 30520, 31255
Skin	Skin procedures including debridement, reconstructive, wound closure, excision and/or repair	11042, 11642, 13121, 13132, 14040, 14060, 15260, 17311
Cardiovascular*	Central line procedures	36561

*Cardiovascular: all procedures performed on heart and vessels.

Measure Title: Influenza Vaccination Coverage among Healthcare Personnel

MEASURE ID #: ASC-8

QUALITY REPORTING OPTION:
CMS requires ASCs participating in the CMS Ambulatory Surgical Quality Reporting Program to report data collected by CDC via the National Healthcare Safety Network (NHSN).

REPORTING MECHANISM:
The NHSN is a secure, internet-based surveillance system maintained and managed by the CDC.

REPORTING REQUIRED BY:
All separately identifiable entities certified as an ASC by Medicare, regardless of specialty or case mix

DESCRIPTION:
For more information about the NHSN measures, see the resources located at http://www.cdc.gov/nhsn/

Annual data submission period: See the timeline posted to QualityNet.org for this measure; select ASCs and then Data Submission in the drop-down menu.

DEFINITIONS:
Healthcare personnel (HCP) - Facilities must report vaccination data for three categories of HCP: employees on payroll; licensed independent practitioners (who are physicians, advanced practice nurses, and physician assistants affiliated with the hospital but not on payroll); and students, trainees, and volunteers aged 18 or older. All HCP physically working in the facility for at least one day or more between October 1 and March 31 should be counted. Data on vaccinations received at the facility, vaccinations received outside of the facility, medical contraindications, and declinations are reported for the three categories of HCP.

Direct questions regarding NHSN training, enrollment and submission to: NHSN@cdc.gov.

Sampling Size Specifications

ASC-9, ASC-10 and ASC-11

The Sampling size specifications for ASC-9, ASC-10 and ASC-11* have been established and are specified in the table below.

Table 3: Sample Size Requirements per year per ASC for Endoscopy/Polyp Surveillance (ASC-9 and ASC-10) or Cataracts (ASC-11*) measures.**

Population Per Year	**0-900**
Yearly Sample Size	63
Quarterly Sample Size	16
Monthly Sample Size	6
Population Per Year	**≥ 901**
Yearly Sample Size	96
Quarterly sample Size	24
Monthly Sample Size	8

*Voluntary submission of data for ASC-11 will begin January 2015.
**For ASCs with fewer than 63 cases, the total population of cases is required.

Measure Title: Endoscopy/Polyp Surveillance: Appropriate Follow-up Interval for Normal Colonoscopy in Average Risk Patients

MEASURE ID #: ASC-9

QUALITY REPORTING OPTION:
Web-based measure

REPORTING MECHANISM:
Web-based tool on the Secure QualityNet Portal

REPORTING REQUIRED BY:
All separately identifiable entities certified as an ASC by Medicare, regardless of specialty or case mix

DESCRIPTION:
Percentage of patients aged 50 years and older receiving a screening colonoscopy without biopsy or polypectomy who had a recommended follow-up interval of at least 10 years for repeat colonoscopy documented in their colonoscopy report

DENOMINATOR:
All patients aged 50 years and older receiving screening colonoscopy without biopsy or polypectomy

Inclusions: Patients aged ≥ 50 on date of encounter

AND
ICD-9-CM Diagnosis code: V76.51
AND
CPT or HCPCS: 45378, G0121
WITHOUT
CPT Category I Modifiers: 52, 53, 73, 74
WITHOUT
ICD-9-CM Diagnosis codes: V18.51, V12.72, V16.0, V10.05

Exclusions: Documentation of medical reason(s) for not recommending at least 10 years follow-up interval (e.g., above average risk, inadequate prep)

NUMERATOR:
Patients who had a recommended follow-up interval of at least 10 years for repeat colonoscopy documented in their colonoscopy report

ANNUAL DATA SUBMISSION PERIOD:
See the timeline posted to QualityNet.org for this measure; select ASCs and then Data Submission in the drop-down menu.

ADDITIONAL INSTRUCTIONS:
Patients will be counted in the numerator if there is reference in the final colonoscopy report that the appropriate follow-up interval for the repeat colonoscopy is at least 10 years from the date of the current colonoscopy (i.e., the colonoscopy performed during the measurement period).

Measure Title: Endoscopy/Polyp Surveillance: Colonoscopy Interval for Patients with a History of Adenomatous Polyps – Avoidance of Inappropriate Use

MEASURE ID #: ASC-10

QUALITY REPORTING OPTION:
Web-based measure

REPORTING MECHANISM:
Web-based tool on the Secure QualityNet Portal

REPORTING REQUIRED BY:
All separately identifiable entities certified as an ASC by Medicare, regardless of specialty or case mix

DESCRIPTION:
Percentage of patients aged 18 years and older receiving a surveillance colonoscopy, with a history of a prior colonic polyp(s) in previous colonoscopy findings, who had a follow-up interval of 3 or more years since their last colonoscopy

DENOMINATOR:
All patients aged 18 years and older receiving a surveillance colonoscopy

Inclusions: Patients aged ≥ 18 years on date of encounter

AND

Diagnosis for history of colonic polyp(s) (ICD-9-CM)**:** V12.72, V10.05

AND

CPT or HCPCS: 44388, 44389, 44392, 44393, 44394, 45355, 45378, 45380, 45381, 45383, 45384, 45385, G0105

WITHOUT

CPT Category I Modifiers: 52, 53, 73 or 74

Exclusions:

- Documentation of medical reason(s) for an interval of less than 3 years since the last colonoscopy (e.g., patients with high risk for colon cancer, last colonoscopy incomplete, last colonoscopy had inadequate prep, piecemeal removal of adenomas, or last colonoscopy found greater than 10 adenomas).
- Documentation of system reason(s) for an interval of less than 3 years since the last colonoscopy (e.g., unable to locate previous colonoscopy report).

NUMERATOR:
Patients who had an interval of 3 or more years since their last colonoscopy

ANNUAL DATA SUBMISSION PERIOD:
See the timeline posted to QualityNet.org for this measure; select ASCs and then Data Submission in the drop-down menu.

ADDITIONAL INSTRUCTIONS:
For the purpose of this measure, a surveillance colonoscopy is defined as the colonoscopy performed after a colonic polyp(s) has been detected and removed. The denominator of this measure is the total number of patients ≥ 18 years of age receiving a surveillance colonoscopy. The numerator is the number of patients receiving a surveillance colonoscopy 3 years or greater after the colonoscopy

showing the colonic polyp. Information regarding the performance interval can be obtained from medical record documentation.

Measure Title: Cataracts – Improvement in Patient's Visual Function within 90 Days Following Cataract Surgery

MEASURE ID #: ASC-11

QUALITY REPORTING OPTION:
Web-based measure

REPORTING MECHANISM:
Web-based tool on the Secure QualityNet Portal

REPORTING REQUIRED BY*:
All separately identifiable entities certified as an ASC by Medicare, regardless of specialty or case mix

DESCRIPTION:
Percentage of patients aged 18 years and older who had cataract surgery and had improvement in visual function achieved within 90 days following the cataract surgery

DENOMINATOR:
All patients aged 18 years and older who had cataract surgery and completed **both** a pre-operative and post-operative visual function instrument

Inclusions: Patients aged ≥18 years

AND

CPT (with or without modifiers): 66840, 66850, 66852, 66920, 66930, 66940, 66982, 66983, 66984

Exclusions: Patients who did not complete both a pre-operative and post-operative survey

NUMERATOR:
Patients who had improvement in visual function achieved within 90 days following cataract surgery, based on completing both a pre-operative and post-operative visual function instrument

ANNUAL DATA SUBMISSION PERIOD:
See the timeline posted to QualityNet.org for this measure; select ASCs and then Data Submission in the drop-down menu.

ADDITIONAL INSTRUCTIONS:
Definition for Survey: An appropriate data collection instrument is an assessment tool that has been validated for the population for which it is being used; this measure utilizes a visual function survey. While it is recommended that the facility obtain the survey results from the appropriate physician or optometrist, the surveys can be administered by the facility via phone, mail, email or during clinician follow-up. For this measure, the same data collection instrument (i.e., survey) must be used pre-operatively and post-operatively.

Examples of tools for visual function assessment include, but are not limited to: National Eye Institute-Visual Function Questionnaire (VFQ- http://www.rand.org/health/surveys_tools/vfq.html), the Visual Function (VF)-14, the modified VF-8, the Activities of Daily Vision Scale (ADVS), the Catquest and the modified Catquest-9.

*Finalized in the CY 2015 OPPS/ASC final rule, ASCs have the option to voluntarily collect and submit data for ASC-11 for the CY 2017 payment determination and subsequent years. All data submitted voluntarily will be publically reported as discussed in the CY 2014 OPPS/ASC proposed rule (78 FR 75138 to 75139).

Measure Title: Facility Seven-Day Risk-Standardized Hospital Visit Rate after Outpatient Colonoscopy

Introduction

This section of the manual includes the Measure Information Form (MIF) for the CMS 7-Day Risk-Standardized Outpatient Colonoscopy Measure. This is an administrative claims data-based measure, so there is no abstraction responsibility on the part of the facility. The measure includes colonoscopies performed for Medicare FFS beneficiaries aged ≥65 years who received an outpatient colonoscopy at a hospital outpatient department (HOPD) or ambulatory surgical center (ASC).

CMS has finalized adoption of the measure into the Hospital ASCQR Program for the calendar year 2018 payment determination and subsequent years.

This measure was developed by a team of clinical and statistical experts from the Yale University/Yale New Haven Health Services Corporation Center for Outcomes Research and Evaluation (YNHHSC/CORE). The measure was developed by YNHHSC/CORE under contract to CMS. The measure is currently undergoing review by the National Quality Forum (NQF).

The information in the following MIF is being provided in the interest of transparency and to promote understanding of the methodology on the part of the facility and vendor communities. Additional background information about the measure methodology can be found in the measure technical report (http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/HospitalQualityInits/Measure-Methodology.html). Questions and comments about the measure should be directed to CMSColonoscopyMeasure@yale.edu.

CMS calculates the facility-level risk-standardized unplanned hospital visit rate. Facilities and their ORYX® Vendors do not have sufficient data to produce the facilities' risk-standardized unplanned hospital visit rate. CMS extracts and utilizes physician office, inpatient, and outpatient claims data from the year prior to the colonoscopy as well as claims data from the colonoscopy to risk adjust the rates for the measure. Finally, CMS inpatient and outpatient data is used to determine whether a beneficiary has had a hospital visit within 7 days of the colonoscopy.

Measure Title: Facility Seven-Day Risk-Standardized Hospital Visit Rate after Outpatient Colonoscopy

MEASURE ID #: ASC-12

QUALITY REPORTING OPTION:
CMS Outcome Measure (Claims Based)

REPORTING MECHANISM:
Medicare Part B Fee-for-Service Claims, including for Medicare Railroad Retirement Board beneficiaries and Medicare Secondary Payer claims

REPORTING PERIOD:
The reporting period for Medicare claims begins January 1 and continues until December 31 of each calendar year.

REPORTING REQUIRED BY:
All entities paid under the Medicare Ambulatory Surgical Center Fee Schedule (ASCFS), regardless of specialty or case mix

DESCRIPTION: The measure estimates a facility-level rate of risk-standardized, all-cause, unplanned hospital visits within 7 days of an outpatient colonoscopy among Medicare fee-for-service (FFS) patients aged 65 years and older.

RATIONALE: This measure will reduce adverse patient outcomes associated with preparation for colonoscopy, the procedure itself, and follow-up care by capturing and making more visible to providers and patients all unplanned hospital visits following the procedure. The measure score will assess quality and inform quality improvement.

IMPROVEMENT NOTED AS: A decrease in the facility-level risk-standardized unplanned hospital visit rate

NUMERATOR STATEMENT:
This outcome measure does not have a traditional numerator and denominator like a core process measure (e.g., percentage of adult patients with diabetes aged 18-75 years receiving one or more hemoglobin A1c tests per year); thus, we are using this field to define the outcome. The calculation of the rate is defined below under Measure Calculation.

The outcome for this measure is all-cause, unplanned hospital visits within 7 days of an outpatient colonoscopy. CMS defines a hospital visit as any emergency department (ED) visit, observation stay, or unplanned inpatient admission.

DENOMINATOR STATEMENT:
The target population for this measure includes colonoscopies performed at hospital outpatient departments (HOPDs) and ambulatory surgical centers (ASCs) for Medicare FFS patients aged 65 years and older.

INCLUDED POPULATIONS:
Colonoscopies performed at HOPDs and ASCs for Medicare FFS patients aged 65 years and older.

CMS FFS beneficiaries with an outpatient colonoscopy are included if the patient has been enrolled in Part A and Part B Medicare for the 12 months prior to the date of procedure to ensure a full year of administrative data for risk-adjustment.

CMS did not include colonoscopy CPT procedure codes in the measure that reflected fundamentally higher-risk or different procedures. Those procedures billed with a qualifying colonoscopy procedure code and a high-risk colonoscopy procedure code were not included in the measure.

CPT codes that define the patient cohort

G0121	Colonoscopy on individual not meeting criteria for high risk
G0105	Colonoscopy on individual at high risk of colorectal cancer
45378	Diagnostic colonoscopy
45380	Colonoscopy with biopsy
45385	Colonoscopy with ablation of lesion(s)/polypectomy by snare
45384	Colonoscopy with ablation of lesion(s)/polypectomy by hot biopsy forceps or bipolar cautery
45383	Colonoscopy with ablation of lesion(s)/polypectomy by other techniques (i.e., techniques other than 45384/45385)
45381	Colonoscopy, with directed submucosal injection, any substance

Cohort exclusions (excluded colonoscopies):

- Colonoscopies for patients who lack continuous enrollment in Medicare FFS Parts A and B in the 1 month after the procedure.
- Colonoscopies that occur concurrently with high-risk upper gastrointestinal (GI) endoscopy procedures.
- Colonoscopies for patients with a history of inflammatory bowel disease (IBD).
- Colonoscopies for patients with a history of diverticulitis.

Admissions not counted as readmissions ("Planned readmissions"):

Admissions identified as planned by the planned admission algorithm are not counted as admissions. The "algorithm" is a set of criteria for classifying admissions as planned using Medicare claims. The algorithm identifies admissions that are typically planned and may occur within 7 days of an outpatient colonoscopy. CMS based the planned admission algorithm on three principles:

1. A few specific, limited types of care are always considered planned (obstetrical delivery, transplant surgery, maintenance chemotherapy, rehabilitation);
2. Otherwise, a planned admission is defined as a non-acute admission for a scheduled procedure; and
3. Admissions for acute illness or for complications of care are never planned.

The planned admission algorithm uses a flow chart and four tables of procedures and conditions to operationalize these principles and to classify readmissions as planned. The flow chart and tables are available in a report, Facility 7-Day Risk-Standardized Hospital Visit Rate after Outpatient Colonoscopy Measure Technical Report, at http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/HospitalQualityInits/Measure-Methodology.html

Risk Adjustment:

CMS's approach to risk adjustment is tailored to, and appropriate for, a publicly reported outcome measure as articulated in published scientific guidelines (Krumholz et al., 2006; Normand et al., 2007).

CMS uses a two-level hierarchical logistic regression model to estimate risk-standardized hospital visit rates. This approach accounts for the clustering of patients within facilities and variation in sample size.

The risk-standardization model has 15 patient-level variables (age, concomitant upper GI endoscopy, polypectomy and 12 comorbidity variables). CMS defines comorbidity variables using condition categories (CCs), which are clinically meaningful groupings of more than 15,000 ICD-9 diagnosis codes. Certain CCs are considered possible complications of care and are not risk-adjusted for if they only occur at the procedure. This is because only comorbidities that convey information about the patient at the time of the procedure or in the 12 months prior, and not complications that arose during the colonoscopy procedure, are included in the risk adjustment. See attached Data Dictionary, sheet "S.14 Stat Risk Model Method" for CCs that are considered possible complications of care and are not risk-adjusted for if they only occur at the procedure.

The patient-level risk-adjustment variables are:

Demographics	Age (categorized; 65-69; 70-74; 75-79; 80-84; 85+)
Procedural factors	Concomitant Endoscopy Polypectomy during Procedure
Comorbidities	Chronic Heart Failure Ischemic Heart Disease Stroke/Transient Ischemic Attack (TIA) Chronic Lung Disease Metastatic Cancer Liver Disease Iron Deficiency Anemia Disorders of Fluid, Electrolyte, Acid-Base Pneumonia Psychiatric Disorders Drug and Alcohol Abuse/Dependence Arrhythmia Age Categorized x Arrhythmia Interaction

Note: The relationship between risk of a hospital visit within 7 days and age was modified by the presence or absence of a cardiac arrhythmia (p-value for interaction <0.001). Therefore, we included an interaction term (age categorized x arrhythmia) in the final model.

Full details of the development of the risk-standardization model for this measure are available at: http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/HospitalQualityInits/Measure-Methodology.html

Data Collection Approach: Medicare administrative claims and enrollment data

Data Accuracy: The administrative claims data used to calculate the measure are maintained by CMS' Office of Information Services. These data undergo additional quality assurance checks during measure development and maintenance.

Measure Analysis Suggestions: None

Sampling: No

Data Reported As: Facility-level 7-day risk-standardized unplanned hospital visit rate following outpatient colonoscopy

Measure Calculation:
The measure estimates 7-day facility-level risk-standardized unplanned hospital visit rates using hierarchical logistic regression modeling (a form of hierarchical generalized linear modeling [HGLM]). In brief, the approach simultaneously models two levels (patient and facility) to account for the variance in patient outcomes within and between facilities. At the patient level, the model adjusts the log-odds of a hospital visit within 7 days of the procedure for age, procedural factors, and selected clinical covariates. At the facility level, it estimates the facility-specific intercepts as arising from a normal distribution. The facility intercept represents the underlying risk of a hospital visit within 7 days after a colonoscopy at that facility while accounting for patient risk. The facility-specific intercepts also account for the clustering (non-independence) of patients within the same facility. If there were no differences among facilities, then after adjusting for patient risk the facility-specific intercepts would be identical across all facilities.

The statistical modeling approach is described fully in the original technical report: http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/HospitalQualityInits/Measure-Methodology.html

Selected References:

- Krumholz HM, Brindis RG, Brush JE, et al. Standards for Statistical Models Used for Public Reporting of Health Outcomes: An American Heart Association Scientific Statement From the Quality of Care and Outcomes Research Interdisciplinary Writing Group: Cosponsored by the Council on Epidemiology and Prevention and the Stroke Council Endorsed by the American College of Cardiology Foundation. *Circulation*. 2006; 113 (3): 456-462.
- Normand S-LT, Shahian DM. Statistical and Clinical Aspects of Hospital Outcomes Profiling. *Stat Sci.* 2007; 22 (2): 206-226.

APPENDIX A: DATA DEFINITIONS

Admission: Completion of registration after physical entry into the facility.

Antibiotic administered on time: Antibiotic infusion is *initiated* within one hour prior to the time of the initial surgical incision or the beginning of the procedure (e.g., introduction of endoscope, insertion of needle, inflation of tourniquet) or two hours prior if vancomycin or fluoroquinolones are administered.

Burn: Unintended tissue injury caused by any of the six recognized mechanisms: scalds, contact, fire, chemical, electrical or radiation, (e.g. warming devices, prep solutions, electrosurgical unit or laser).

Discharge: Occurs when the patient leaves the confines of the ASC.

Fall: A sudden, uncontrolled, unintentional, downward displacement of the body to the ground or other object, excluding falls resulting from violent blows or other purposeful actions. (National Center for Patient Safety)

Hospital transfer/admission: Any transfer/admission from an ASC directly to an acute care hospital including hospital emergency room or emergency department after admission to the ASC.

Intravenous: Administration of a drug within a vein, including bolus, infusion or IV piggyback.

Order: A written order, verbal order, standing order or standing protocol.

Prophylactic antibiotic: An antibiotic prescribed with the intent of reducing the probability of an infection related to an invasive procedure. For purposes of the Prophylactic IV Antibiotic Timing measure, the following antibiotics are considered prophylaxis for surgical site infections: Ampicillin/sulbactam, Aztreonam, Cefazolin, Cefmetazole, Cefotetan, Cefoxitin, Cefuroxime, Ciprofloxacin, Clindamycin, Ertapenem, Erythromycin, Gatifloxacin, Gentamicin, Levofloxacin, Metronidazole, Moxifloxacin, Neomycin and Vancomycin.

Quality Data Code (QDC): Non-payable Healthcare Common Procedure Coding System (HCPCS) codes comprised of specified CPT Category II codes and/or G-codes that describe the clinical action required by a measure's numerator.

Wrong: Not in accordance with intended site, side, patient, procedure or implant.