# **Documentation and Coding for the AHRQ Quality Indicators**

**Note:** This tool was updated based on test software provided by AHRQ as of March 2016 (alpha version of SAS QI v6.0). This documentation and coding tool is updated less frequently than are the QI specifications. Thus, it is possible that certain documentation and coding tips offered in this document may become outdated as the QI specifications change. Please refer to AHRQ's QI software Web site (<a href="http://www.qualityindicators.ahrq.gov/software">http://www.qualityindicators.ahrq.gov/software</a>) for the most updated information on the software and indicator technical specifications. Along with any questions you may have, AHRQ welcomes any coding and documentation tips you may wish to offer at QIsupport@ahrq.hhs.gov.

What is this the purpose of this tool? The purpose of this tool is to facilitate improvements to documentation and coding processes to ensure that the AHRQ Quality Indicator (QI) rates – specifically Pediatric Quality Indicator (PDI) and Patient Safety Indicator (PSI) rates – are accurate. The tool has two sections. The first describes procedures to address problems with documentation and coding practices among providers and hospital staff. The second illustrates some of the issues that can arise when documenting and coding each QI.

Who are the target audiences? The primary audiences for this tool are providers, clinical documentation improvement specialists, coders, and quality officers. All of them have roles in the coding of diagnoses and procedures from medical records, which will be used to calculate QI rates.

How can this tool help you? By using this tool, stakeholders should gain a better understanding of how documentation and coding can affect QI rates. They will also learn about actions they can take to estimate their QI rates more accurately. Efforts to improve documentation and coding accuracy can reduce variability in data, increase confidence in the QI rates, and help identify areas where improvements can be made in both measurement and care processes.

How does this tool relate to the others? This tool should be used in conjunction with the other tools for applying QIs to hospital data (B tools). After you calculate your hospital's QI rates, you can assess their validity by examining how accurately providers document diagnoses, procedures, events, and related issues. You also can look at how accurately these items were coded for use in quality measurement and billing processes.

i

# Addressing the Documentation and Coding Process

The documentation and coding process is the transformation of clinical diagnostic statements and health care procedure notes into alphanumeric ICD-10-CM-PCS<sup>i</sup> code numbers. The code numbers are detailed to accurately describe the diagnoses (the conditions the patient is seen for in the health care setting) and the procedures performed to diagnose or treat the patient

Policymakers are placing greater emphasis on quality performance and expect hospitals to report on clinical care measures. Therefore, hospitals are now focusing both on coding for appropriate reimbursement and coding for accurate quality measurement and reporting.

The documentation and coding issues and suggested actions discussed in this section are relevant not only for coding of medical information for the PDIs and PSIs but also for a hospital's entire documentation and coding process. In the following section, issues specific to the QIs are discussed, including issues and actions specific to each QI.

Coders must use the documentation provided by the treating providers, in compliance with coding guidelines (CDC, 2016; CMS, 2016), to establish the codes for each inpatient stay. To achieve accurate coding, providers need to understand the coding process and the rules that must be followed to ensure coding objectivity.<sup>ii</sup> Providers should use consistent language and specific diagnostic terms to document clinical care and to provide the complete information needed for accurate coding. Also needed is a well-established process through which clinical documentation improvement (CDI) specialists and coders can query providers to resolve questions or issues (Preskitt, 2005; Ballentine, 2009). The American Health Information Management Association (AHIMA) offers guidance on how best to establish CDI and compliant query practices (Bryant, et al., 2010; Bundenthal, et al., 2013).

In summary, effective documentation and coding processes involve the following key steps:

- *Documentation*: Establish documentation criteria for providers, including criteria for complete and timely notes.
- *Coding*: Establish coding policy, including conditions or events using the documentation from providers, and offer ongoing training and education..
- Query process: Establish an effective process that CDI specialists and coders can use to obtain clarification from providers on their documentation that may affect the coding process.

## **Documentation by Providers**

Because coders can use only documentation from the treating providers that complies with coding regulations, physicians and other providers need to understand coding requirements and the CDI process. The CDI specialist is the bridge between the coder and provider. CDI specialists use the entire record to look for clinical indications of diagnoses or procedures that

1

<sup>&</sup>lt;sup>i</sup> ICD-10-CM = International Classification of Diseases, 10<sup>th</sup> Revision; PCS = Procedure Coding System

ii Refer to the coding guidelines in the *AHA Coding Clinic* (2015), as designated by the four cooperating parties: American Hospital Association, American Health Information Management Association, Centers for Medicare & Medicaid Services, and National Center for Health Statistics.

are missing, lack specificity, or need clarification. The provider should answer the CDI query and document accordingly in the record for the coder to code. In addition, some general documentation practices should be consistently followed:

- Avoid abbreviations and symbols.
- Write complete SOAP (subjective, objective, assessment, and plan) notes.
- Avoid using copy and paste when using electronic documentation.
- Be thorough when making selections from "pick-lists" embedded in electronic records.
- Become familiar with rules and concepts of documentation and coding.
- Be accurate and comprehensive; your documentation should "tell" the patient's clinical story of his or her conditions, treatments, and outcomes.
- Document a thorough history and physical.
- Document the outcomes of "rule out," "consider," and "possible" diagnoses.
- Identify the principal diagnosis or reason for admission.
- Include all secondary diagnoses and conditions that affect the patient's care or the clinical decisionmaking process.
- Document the reason for and objective of all operating room (OR) and non-OR procedures performed. This is particularly important with ICD-10-PCS code assignment.
- Answer all queries for clarification promptly and fully. Be sure to document the clarification or additional information in the medical record.

## **Expert Coding**

Coders should be encouraged and empowered to focus on the quality of coding, not just productivity or reimbursement. It is important to take the time to ensure that the coded record is an accurate representation of the patient's clinical condition and treatment. Clinical documentation specialists and coders should make careful queries to providers to clarify documentation when needed. Hospitals have found that the following issues have been sources of coding errors:

- Incomplete or inadequate provider documentation.
- Incorrect principal diagnosis selection, such as:
  - Coding a condition when a complication code should have been used.
  - Coding a symptom or sign rather than the diagnosis.
  - Coding only from the discharge summary and not the complete medical record.
  - Incorrectly applying the coding guidelines for principal diagnosis, especially when two or more diagnoses equally meet the definition of principal diagnosis.
- Incorrect or missing comorbidities or complications.
- Incorrect present on admission (POA) assignment of hospital-acquired conditions and vice versa; a list of diagnoses exempt from POA assignment can be found in Appendix 1 of the ICD-10-CM Official Guidelines for Coding and Reporting (CDC, 2016; CMS, 2016).
- Limitation of coding to the Medicare Severity diagnosis-related group (MS-DRG) (i.e., not coding the full record because reimbursement will not change with additional codes).

2

- Incorrect MS-DRG assignment.
- Encoder errors or incorrect encoder pathway.

- Reliance on computer-assisted coding software without thorough accompanying review of the complete medical record.
- Coders' lack of familiarity with ICD-10-PCS root operation definitions.

### **Query Process**

Queries may be generated whenever the medical record lacks codable documentation or information is missing, conflicting, ambiguous, or illegible. It is important to have a well-defined query process to ensure that your clinical documentation specialists and coders can effectively obtain needed information without leading the provider or miscoding the information. A sample query form is provided below that might be used in that process. Hospitals may choose to form a CDI team consisting of trained nurses, coders, and other specialists that concurrently reviews charts and queries providers to clarify documentation prior to discharge.

Although coders cannot use documentation from nurses and allied health professionals, their notes often provide clues to issues that the provider may have failed to document. Hospitals may consider coordinating nurses' notes with provider documentation, especially for QIs for which nurses' notes are known to be a good source of information (e.g., pressure ulcers).

### **SAMPLE QUERY FORM**

**Rationale:** This is an example of a query necessary to determine the clinical significance of a condition resulting from a procedure.

Clinical scenario: During the removal of an abdominal mass, the surgeon documents, in the description of the operative procedure, a "serosal injury to the stomach was repaired with interrupted sutures."

1	
- ·	he operative procedure a serosal injury to the stomach was noted sutures. Was this serosal injury and repair:
A complication of the procedu	ure
Integral to the above procedur	e
Not clinically significant	
Other	
Clinically Undetermined	
Please document your respons substantiation.	se in the health record or below accompanied by clinical
Name:	Date:

### **Clinical Documentation Improvement**

Many hospitals have implemented a CDI program to successfully enhance the quality of clinical data. The essential steps for achieving an effective CDI program are described in the UHC clinical documentation challenges 2009 field book (UHC, 2009):

- Hire and train expert clinical documentation specialists to conduct concurrent chart review and clarify documentation before discharge.
- Educate providers about the need to partner with CDI staff to ensure the accuracy of performance data.
- Implement practices that support documentation improvement, such as a query process, education, tools and aids, and expert coding.
- Hold providers accountable for compliance with documentation requirements (e.g., financial incentives, recredentialing criteria, suspension, and peer review).
- Hold providers accountable for responding to queries for documentation clarification.
- Benchmark documentation and coding performance and communicate the results.
- Recognize and reward good performance.

Hospitals have successfully used a variety of structures for their CDI program, depending on their specific needs and cultures. Some approaches that have been successfully used by CDI programs to promote comprehensive documentation and accurate data include (UHC, 2010):

- Focus on units or services with poor performance data (e.g., elevated mortality index, high PDI or PSI rates).
- Track and communicate documentation query response rates by provider.
- Implement user-friendly query response methods (e.g., electronic queries linked to the medical record and documentation resources).
- Query for secondary diagnoses, comorbidities, complications, and risk-adjustment factors even when the additional codes will not change reimbursement.
- Review all deaths (e.g., patients who died with a low risk of mortality) to uncover improvement opportunities for documentation and coding and safe, high-quality clinical care.

# Specific Strategies for Successful Documentation and Coding

The following strategies to improve coding processes have been delineated (Ballentine, 2009; UHC, 2009):

- Educational initiatives for clinical documentation specialists and coders:
  - Introductory didactic presentations on the QIs and how their rates are calculated.
  - Online tutorial: documentation and coding.
  - Periodic memos with coding tips ("Tip of the Month").
  - Comprehensive online references and coding tips.
  - o Posters, announcements, and branding.
- Provider support:
  - o Introductory didactic presentations on the QIs and how their rates are calculated.

- o Training on documentation and coding and how they can affect the hospital.
- Intranet site with references and frequently asked questions.
- Clinical documentation improvement liaisons.
- Electronic health record offering on-demand documentation assistance.
- o Direct contact with clinical documentation specialists and coders.
- Feedback associated with analysis of performance data and query response results.
- o Provider champions or dedicated documentation and coding specialists.
- Presentation of a focus topic each month with suggestions to prevent patient safety events.
- CDI team and coding department changes:
  - Adequate staffing with expert CDI staff and coders.
  - o Ongoing training and education for CDI specialists and coders.
  - Standing documentation and coding committee.
  - Internal and external audits of documentation and coding accuracy.

### **Training**

Training for providers, clinical documentation specialists, and coders is essential to respond to changing expectations for accurate coding of clinical conditions and quality measures. Training also helps promote mutual understanding of clinical and coding terminology.

Provider buy-in is critical for effective documentation and coding, which can be encouraged through careful education, executive support, and provider champions. It also is important to hold providers accountable for compliance with documentation expectations and timely query responsiveness. To get buy-in, you can provide handouts (such as the fact sheets in this QI Toolkit [Tools A1a, A1b, and A1c] and information about ICD-10 codes and how they are applied), pocket guides, and electronic health record alerts with coding terminology and frequently asked questions. Hospitals may want to make clinical documentation specialists available to provide real-time chart review, provider clarification, and one-on-one education.

One effective method for gaining buy-in from providers for documentation improvement is to present QI rates based on their current style of documentation, side by side with revised rates after documentation clarification. This type of presentation highlights the consequences of inadequate documentation and the importance of standardization and clarification.

The hospital should periodically upgrade the skills of clinical documentation and coding staff. Coding errors may be due to a lack of knowledge of coding principles and terminology, or due to unfamiliarity with changing coding and/or external regulatory requirements. The quality of staff's initial training, as well as their ability to stay abreast of current guidelines, is fundamental to their expertise. This is especially important during the current ICD-10 transition years.

## Ways To Establish an Effective Coding Communication and Review Process

The hospital can build a foundation for an accurate and comprehensive coding process by establishing written coding compliance policies that provide instructions on the entire process, from point of service to billing or claim forms. The American Health Information Management Association has published a coding compliance document that lays out a set of suggested protocols to include in an organization's policies (AHIMA 2010). This document is a useful

5

guide for developing hospital documentation and coding policy, which would include a standard process for the management of documentation, queries, coding, and ongoing quality assurance. AHIMA offers other resources, including guidance on developing a CDI program (Bryant, et al., 2010), a Toolkit with sample forms and other resources to get started (AHIMA 2014), and a collaborative position statement for writing compliant, nonleading queries (Bundenthal, et al., 2013).

# **Actions To Code Patient Safety Events Accurately**

A number of issues during both the documentation and coding processes can affect the validity of the PDIs and PSIs. The *positive predictive value (PPV)* is an assessment of how accurately the measurement (i.e., the reported QI rate) reflects the occurrence of actual events. The formula for PPV is:

Positive Predictive Value (PPV) = True Positives/Flagged Cases

The ideal value for PPV is equal to 1, where the number of true positives is equal to the number of flagged cases. If the number of true positives is lower than the number of flagged cases (PPV <1) (e.g., individuals were coded as having a patient safety event when no event actually occurred), there is a problem with *false positives*.

On the other hand, the problem may be one of missed cases that should have been detected, which would result in the number of true positives being higher than the number of flagged cases. Missed cases, known as false negatives, are more difficult to address than false positives, because they are present in cases that were not identified for calculating QI rates. Finding missed cases requires a new review of the relevant cases (in the rate denominator) for evidence of events that previously had not been documented, coded, and flagged.

#### **Reasons for False Positives**

Several key reasons for false positives in the QI rates have been identified by hospitals and reported in the health care literature. These include coding of POA, miscoding, lack of coding specificity, inclusion of nonelective surgical admissions, and inaccurate coding of history of events.

**Present on admission.** One of the most frequently cited causes of false positive cases is improper use of the POA flag (Glance, et al., 2008). Most PDIs and PSIs have a coding exception that removes cases that arrived at the hospital with a condition that would be coded as a patient safety event had it occurred during the patient's stay (see Tables 3 and 4). If POA is not indicated in the documentation or is not properly coded, the QI rate will be inflated (Houchens, et al., 2008).

Improper use of the POA flag is a particular problem for hospitals that receive many transfers from other institutions. When the clinical conditions are unclear, it is appropriate for the provider to document "rule out," "possible," or "consider" diagnoses as long as he or she thoroughly documents the resolution of these tentative conditions in the medical record.

**Miscoding.** Diagnosis or procedure codes can be miscoded by assigning an incorrect code, omitting a code, or coding additional codes when not needed, which may also lead to inflated QI

How To Improve Hospital Quality and Safety

rates. It is recommended that there be an ongoing process in place to audit coding, track and report errors, and provide feedback and education. The ICD-10 coding classification presents a new set of challenges for coders and CDI specialists and will require closer scrutiny in the early phases of transition.

**Lack of coding specificity.** If documentation or codes are not specific enough, rates can be inflated. This issue is especially important for the following QIs:

• PDIs 10 and 12 (Postoperative Sepsis and Central Venous Catheter-Related Bloodstream Infection [CLABSI]) and PSIs 07 and 13 (Central Venous Catheter-Related Bloodstream Infection [CLABSI] and Postoperative Sepsis). A provider may write, "consider sepsis," despite the lack of evidence of a confirmed infection. Again, it is appropriate for a provider to document tentative conditions and complications as long as he or she follows through to document the confirmation, exclusion, or suspected and treated but uncertain conditions.

Another example of lack of coding specificity is a bias against coding comorbidities or incorrect MS-DRG assignment for patients who die (Iezzoni, et al., 1992). The rate for PSI 02, Death in Low Mortality DRG, is especially vulnerable to this effect. A lack of codes for comorbidities may distort its rate by including cases in the denominator that should not be there, which likely would increase the PSI rate. Incorrect MS-DRG assignment would also bias the rate if patients who die were assigned to a lower MS-DRG group than is appropriate. Hospitals should establish effective mortality review procedures to assess both the quality and safety of clinical care and the accuracy and completeness of clinical documentation and coding.

**History of event.** Providers may document "history of" a disease or illness when it is a long-term, chronic, or ongoing condition. It is important to clearly differentiate current conditions from those historic conditions that have been treated and have completely resolved.

#### **Reasons for Missed Cases**

Finding missed cases in PDI and/or PSI measurements may be much more difficult than finding false positives. Several of the reasons listed above (especially miscoding and lack of specificity) may bias results in a downward direction. For example, missed cases could occur if an accidental laceration is not clearly documented in the medical record or if cases with sepsis are not identified due to incomplete review of the record.

Hospital quality or CDI staff who are interested in finding missed cases may need to come up with creative solutions for finding them. One example would be to inspect laboratory documentation of infections to search for missed line infections. Another would be to audit charts to find missed cases, especially those of high-risk patients (e.g., long length of stay, ICU populations who may be at risk for pressure ulcers or CLABSI, deaths, oncology patients).

### **Documentation and Coding Issues for Individual QIs**

Some specific documentation issues for the PDIs are listed in Table 1 and for the PSIs in Table 2. Some specific coding issues for the PDIs are listed in Table 3 and for the PSIs in Table 4. These issues were identified through a search of published papers on QI measurement issues, and from feedback from hospitals during field testing of the QI Toolkit.

## References

American Health Information Management Association (AHIMA). Defining the Core Clinical Documentation Set for Coding Compliance 2010. Available at: <a href="http://library.ahima.org/xpedio/groups/public/documents/ahima/bok1\_049822.pdf">http://library.ahima.org/xpedio/groups/public/documents/ahima/bok1\_049822.pdf</a>. Accessed March 15, 2016.

American Health Information Management Association (AHIMA) Clinical Documentation Improvement Toolkit: 2014. Available to AHIMA members at: <a href="http://library.ahima.org/xpedio/groups/secure/documents/ahima/bok1\_050585.pdf">http://library.ahima.org/xpedio/groups/secure/documents/ahima/bok1\_050585.pdf</a>. Accessed March 15, 2016.

American Hospital Association. Coding clinic for ICD-10-CM annual subscription. Chicago: AHA; 2015.

Ballentine NH. Coding and documentation: Medicare Severity diagnosis-related groups and present-on-admission documentation. J Hosp Med 2009;4:124-30.

Bryant G, DeVault K, Ericson C, Garrett G, Haik W, Holmes R, Mandler EE. Guidance for clinical documentation improvement programs. Journal of AHIMA/American Health Information Management Association. 2010 May;81(5):45.

Bundenthal S, Belley S, Comfort A, DeVault K, Endicott M, Ericson C, Haik W, Holmes N, Iravedra W, Jurcak F, Meysenburg M. Guidelines for achieving a compliant query practice. Journal of AHIMA/American Health Information Management Association. 2013 Feb;84(2):50.

Centers for Disease Control and Prevention. ICD-10-CM Official Guidelines for Coding and Reporting, FY 2016. Available

at: <a href="http://www.cdc.gov/nchs/data/icd/10cmguidelines\_2016\_Final.pdf">http://www.cdc.gov/nchs/data/icd/10cmguidelines\_2016\_Final.pdf</a>. Accessed March 15, 2016.

Centers for Medicare & Medicaid Services and National Center for Health Statistics. ICD-10-PCS Official Guidelines for Coding and Reporting; 2016. Available at: <a href="https://www.cms.gov/Medicare/Coding/ICD10/Downloads/2016-Official-ICD-10-PCS-Coding-Guidelines-.pdf">https://www.cms.gov/Medicare/Coding/ICD10/Downloads/2016-Official-ICD-10-PCS-Coding-Guidelines-.pdf</a>. Accessed March 15, 2016.

Glance LG, Li Y, Osler TM, et al. Impact of date stamping on patient safety measurements in patients undergoing CABG: experience with AHRQ Patient Safety Indicators. BMC Health Serv Res 2008 Aug 13;8:176.

Houchens RL, Elixhauser A, Romano PS. How often are potential patient safety events present on admission? Jt Comm J Qual Patient Saf 2008;34(3):154-63.

Preskitt JT. CPT and ICD-9-CM coding for surgical residents and new surgeons in practice. Chicago: American College of Surgeons; 2005.

University HealthSystem Consortium. Clinical documentation challenges: benchmarking project field book. Chicago: UHC; 2009.

UHC. Clinical documentation improvement collaborative field brief. Chicago: UHC; 2010.

### **Additional Resources**

Bahl V, Thompson MA, Kau TY, et al. Do the AHRQ Patient Safety Indicators flag conditions that are present at the time of hospital admission? Med Care 2008;46(5):516-22.

Behal R. Post-operative hemorrhage or hematoma (AHRQ Patient Safety Indicator). Dissecting the Red Dot. UHC Presentation/Guideline.

Cevasco M, Borzecki AM, O'Brien WJ, et al. Validity of the AHRQ Patient Safety Indicator "central venous catheter-related bloodstream infections." J Am Coll Surg 2011;212(6):984-90.

Gallagher B, Cen L, Hannan EL. Validation of AHRQ's Patient Safety Indicator for accidental puncture and laceration. In: Henriksen K, Battles JB, Marks ES, et al., eds. Advances in Patient Safety: From Research to Implementation (Volume 2: Concepts and Methodology). Rockville, MD: Agency for Healthcare Research and Quality; 2005.

Grobman WA, Feinglass J, Murthy S. Are the Agency for Healthcare Research and Quality obstetric trauma indicators valid measures of hospital safety? Am J Obstet Gynecol 2006;195(3):868-74.

Haut ER, Noll K, Efron DT, et al. Can increased incidence of deep vein thrombosis (DVT) be used as a marker of quality of care in the absence of standardized screening? The potential effect of surveillance bias on reported DVT rates after trauma. J Trauma 2007;63(5):1132-37.

Iezzoni LI, Foley SM, Daley J, et al. 1992. Comorbidities, complications, and coding bias. Does the number of dx codes matter in predicting in-house mortality? JAMA 1992;267(16):2197-2203.

Neal B, Romano P. Coding postoperative respiratory failure: perspectives and possible changes. UHC Presentation, undated.

Rosen AK, Zhao S, Rivard P, et al. Tracking rates of Patient Safety Indicators over time. Lessons from the Veterans Administration. Med Care 2006;44(9):850-61.

Sadeghi B, Baron R, Zrelak P, et al. Cases of iatrogenic pneumothroax can be identified from ICD-9-CM coded data. Am J Med Qual 2010;25(3):218-24.

Shin MH, Borzecki AM, Rosen AM. Assessing the criterion validity of selected Patient Safety Indicators (PSIs): are they ready for prime time? Academy Health Presentation, June 13, 2011. Available at: www.academyhealth.org/files/2011/monday/shin.pdf. Accessed March 15, 2016.

Shufelt JL, Hannan EL, Gallagher BK. The postoperative hemorrhage and hematoma patient safety indicator and its risk factors. Am J Med Qual 2005;20(4):210-18.

Talsma A, Bahl V, Campbell DA. Exploratory analyses of the "failure to rescue" measure: evaluation through medical record review. J Nurs Care Qual 2008;23(3):202-10.

Utter GH, Cuny J, Sama P, et al. Detection of postoperative respiratory failure: how predictive is the Agency for Healthcare Research and Quality's Patient Safety Indicator? J Am Coll Surg 2010 Sep;211(3):347-54.

Utter GH, Zrelak PA, Baron R, et al. Positive predictive value of the AHRQ accidental puncture or laceration patient safety indicator. Ann Surg 2009;250(6):1041-5.

Vartak S, Ward MM, Vaughn TE. Do postoperative complications vary by hospital teaching status? Med Care 2008;46(1):25-32.

White RH, Sadeghi B, Tancredi DJ, et al. How valid is the ICD-9-CM based AHRQ patient safety indicator for postoperative venous thromboembolism? Med Care 2009;47(12):1237-43.

Zrelak PA, Sadeghi B, Utter GH, et al. Positive predictive value of the Agency for Healthcare Research and Quality Patient Safety Indicator for central line-related bloodstream infection ("selected infections due to medical care"). J Healthc Qual 2011 Mar-Apr;33(2):29-36.

Table 1. Documentation Issues Pertaining to Each Pediatric Quality Indicator

	PDI	Documentation Problems Identified
NQI 01	Neonatal latrogenic Pneumothorax Rate	Document the etiology of pneumothorax - spontaneous or congenital versus caused by medical intervention (iatrogenic). Document whether the condition was present on admission or immediately after birth. Pneumothoraces occurring during or immediately after a procedure are generally considered iatrogenic unless documented to be the result or component of an underlying clinical condition.
NQI 02	Neonatal Mortality Rate	Document and code for anencephaly; polycystic kidney, and/or trisomy in newborns, regardless of gestational age and early or expected mortality.
PDI 01	Accidental Puncture or Laceration Rate	In documenting cuts, punctures, or lacerations, it is important to distinguish between those that are inherent to the procedure itself and those that are unintended and are therefore considered a complication or unexpected event.  Query the physician:  If the physician's postoperative/procedure note and operative/procedure report do NOT clearly describe the circumstances of the puncture or laceration.  If the postoperative/procedure note documentation conflicts with the operative/procedure report.
PDI 02	Pressure Ulcer Rate (stage III, IV, Unstageable)	Diagnosis and site of pressure ulcer must be documented by treating physician. The stage of ulcer can be documented by nursing or other non-physicians clinicians  "Unspecified stage" and "unstageable" are not interchangeable terms; unspecified stage should be used when the stage of the ulcer is not known; unstageable should be used when the stage cannot be clinically determined due to previous graft, recent surgery, eschar, or scar tissue, for example.  If the ulcer progresses from one stage to another higher stage during the encounter, code should be assigned based on the highest stage documented and assigned a POA indicator of "N" for Not present on admission. (CDC Official Coding Guideline).
PDI 03	Retained Surgical Item or Unretrieved Device Fragment	Foreign body intentionally left in during a procedure is NOT considered a retained FB for purposes of coding.
PDI 05	latrogenic Pneumothorax	Document the etiology of pneumothorax; spontaneous or congenital versus caused by medical intervention (iatrogenic). Pneumothoraces occurring during or immediately after a procedure are generally considered iatrogenic unless documented to be the result or component of an underlying clinical condition.  Document and code any associated pleural effusion or chest trauma.

	PDI	Documentation Problems Identified
PDI 08	Perioperative Hemorrhage or Hematoma Rate	Need to distinguish between ecchymosis (flat bruising of the skin) and hematoma (bruising with mass).  Hemorrhage is excessive blood loss; some procedures inherently have large volumes of expected blood loss, so distinguish between expected blood loss and hemorrhage.  Document and code any coexisting coagulation disorders.
PDI 09	Postoperative Respiratory Failure	Either the diagnosis code for "acute postprocedural respiratory failure" OR procedure codes for intubation and mechanical ventilation zero or more days after an OR procedure.  Document the reason for longer than usual postprocedure ventilation; some procedures, by their nature, require ventilation for an extended time.  Document any neuromuscular or neurodegenerative disorders and craniofacial anomalies.
PDI 12	Central Venous Catheter- Related Blood Stream Infection	Differentiate between a central line and a peripheral line infection; the distinction is made by the location of the end of catheter tip (peripheral vs. central vein), not the insertion site.  Document whether the infection is localized to the skin and subcutaneous tunnel or systemic involving the bloodstream.  CV-CRBSI is "infection due to central venous catheter," which means that the catheter is the source of the infection and when the catheter is the source of the infection and when the catheter is the source of the infection and when the catheter is the source of
		the infection, not when the catheter becomes infected from another source (e.g., bacteremia, sepsis from the urinary tract).  • Query if the source of the blood stream infection if not evident  • Query if it is not clear whether the "central line infection" is localized or a bloodstream infection  • Work with physicians to make them aware of the documentation requirements.  • Work with coders to explain how to use codes appropriately.

<sup>\*</sup>NQI 03, PDI 06, PDI 07, PDI 10, PDI 11, and PDI 13 are not included in this table as there were no specific documentation issues to highlight.

Table 2. Documentation Issues Pertaining to Each Patient Safety Indicator

	PSI	Documentation Problems Identified
PSI 02	Death in Low Mortality Diagnosis- Related Groups	Improper documentation and selection of principal diagnosis can group an encounter to Low Mortality DRG when it may not be.
PSI 03	Pressure Ulcer	Encourage providers to document pressure ulcers as part of the admission H&P to help identify ulcers as present on admission. Provider must document the site of pressure ulcer; the stage of the ulcer can be documented and coded from nurse or other clinician notes.  "Unspecified stage" and "unstageable" are not interchangeable terms; unspecified stage should be used when the stage of the ulcer is not known; unstageable should be used when the stage cannot be clinically determined due to previous graft, recent surgery, eschar, or scar tissue, for example.
PSI 04	Death Rate Among Surgical Inpatients With Serious Treatable Complications	Admit type must be correctly assigned. Only Admit Type = 3 for elective admission is included in the denominator. Clearly document all coexisting conditions and comorbidities, both acute and chronic.
PSI 05	Retained Surgical Item or Unretrieved Device Fragment Count	Foreign body intentionally left in during a procedure is NOT considered a retained FB for purposes of coding.
PSI 06	latrogenic Pneumothorax	Document the etiology of pneumothorax - spontaneous or due to an underlying condition, disease, or injury versus caused by medical intervention (iatrogenic). Pneumothoraces occurring during or immediately after a procedure are generally considered iatrogenic unless documented to be the result or component of an underlying clinical condition.
PSI 07	Central Venous Catheter-Related Bloodstream Infections (CV- CRBIs)	Differentiate between a central line and a peripheral line infection; the distinction is made by the location of the end of catheter tip (peripheral vs. central vein), not the insertion site.  Differentiate between localized skin or subcutaneous infection from the CVC and infection that has spread systemically through the blood stream.
Del 00	Doctoporative Hip Execture	<ul> <li>CV-CRBSI is "infection due to central venous catheter," which means that the catheter is the source of the infection, not when catheter becomes infected from another source (e.g., bacteremia, sepsis from the urinary tract).</li> <li>Query if the source of the bloodstream infection if not evident.</li> <li>Query if it is not clear whether the "central line infection" is localized or a bloodstream infection.</li> <li>Work with providers to make them aware of the documentation requirements.</li> <li>Work with coders to explain how to use codes appropriately.</li> </ul>
PSI 08	Postoperative Hip Fracture	Document comorbidity exclusions such as cancer and self-inflicted injury

	PSI	Documentation Problems Identified
PSI 09	Perioperative Hemorrhage or Hematoma	Need to distinguish between ecchymosis (flat bruising of the skin) and hematoma (bruising with mass).  Hemorrhage is excessive blood loss; some procedures inherently have large volumes of expected blood loss; if this is the case document that the blood loss was within limits or expected for the procedure performed.  Document any coexisting coagulation disorders.
PSI 10	Postoperative Physiologic and Metabolic Derangement	Document coexisting conditions, such as CKD, AMI, cardiac arrhythmias, shock, GI hemorrhage, perioperative hemorrhage.  Document any dialysis performed.
PSI 11	Postoperative Respiratory Failure	Either the diagnosis code for "acute postprocedural respiratory failure" OR procedure codes for intubation and mechanical ventilation zero or more days after an OR procedure. Differentiate between respiratory insufficiency or distress and failure; be sure clinical indicators support the documented diagnosis.  Document the reason for longer than usual postprocedure ventilation; some procedures, by their nature, require ventilation for an extended time.  Document any neuromuscular or neurodegenerative disorders and craniofacial anomalies.
PSI 12	Perioperative Pulmonary Embolism or Deep Vein Thrombosis (DVT)	DVT or pulmonary embolism documented as 'rule-out" without further documentation should be clarified with the provider. Diagnoses documented as "rule-out" at discharge will be coded as confirmed per CDC Official Coding Guidelines.  DVT/PE prophylaxis can be mistaken for treatment of confirmed DVT/PE; document reason for the intervention, whether therapeutic vs. prophylactic.
PSI 13	Postoperative Sepsis	<ul> <li>The coded diagnosis of sepsis must be supported by clinical indications and treatment. If the record does not support the diagnosis, consider querying the provider for more information in the following cases: <ol> <li>There is no documentation anywhere in the record of sepsis other than the Discharge Summary.</li> <li>Several progress notes state sepsis but it is not consistent in all of the progress notes and it is not documented at the time of discharge (i.e., discharge summary or final progress note).</li> <li>Sepsis is documented early in the visit (i.e., the emergency department and first progress note) but is not listed as a diagnosis throughout the chart or in the discharge summary.</li> <li>Both bacteremia and sepsis are documented. (bacteremia is a laboratory finding of bacteria in the blood). Seek clarification for conflicting documentation.</li> <li>Sepsis is documented but not supported by the clinical evidence in the record.</li> </ol> </li></ul>

	PSI	Documentation Problems Identified
PSI 14	Postoperative Wound Dehiscence	Document the depth of the wound dehiscence: external/superficial vs. internal/deep. Only abdominopelvic procedures are included and a secondary closure of abdominal wound must be performed.
PSI 15	Accidental Puncture or Laceration	In documenting punctures or lacerations, it is important to distinguish between those that are inherent to the procedure itself and those that are unintended and are therefore considered a complication. Query the provider:  • If the provider's postoperative/procedure note and operative/procedure report do NOT clearly describe the circumstances of the puncture or laceration.  • If the postoperative/procedure note documentation conflicts with the operative/procedure report.
PSI 16	Transfusion Reaction	Transfusion reactions may be documented in nurse or transfusion service notes. Query the provider for agreement and documentation of the reaction if needed.
PSI 18, PSI 19	OB Trauma – Vaginal Delivery With Instrument OB Trauma – Vaginal Delivery Without Instrument	Document clearly the occurrence and severity (degree) of lacerations during delivery.  Episiotomy done to facilitate delivery is NOT the same as a laceration.

Table 3. Coding Issues Pertaining to Each Pediatric Quality Indicator

	PDI	POA Required	Miscoding	Lack of Coding Specificity	Measure Includes Only Elective Admissions
PDI 01	Accidental Puncture or Laceration	Х	Chart reviews have found cases incorrectly coded as PDI that were actually due to normal operative conduct, a disease-related lesion, or complication other than accidental puncture or laceration (bleeding, infection, dislodgement of a gastronomy tube, or fracture).	Occasionally, intraoperative bleeding or other routine events are coded as accidental puncture or laceration Clarify whether lacerations are unintended or an integral part of a procedure, such as to facilitate access to the surgical site in cases of unusual anatomy or extensive disease.	
PDI 02	Pressure Ulcer	Х	If the ulcer progresses from one stage to another higher stage during the encounter, code should be assigned based on the highest stage documented and assigned a POA indicator of "N" for Not present on admission. (CDC Official Coding Guideline).  "Unspecified stage" and "unstageable" are not interchangeable terms; the code for unspecified stage should be used when the stage of the ulcer is not documented or is unknown; unstageable should be used when the stage cannot be clinically determined.	Provider must document the site of pressure ulcer; the stage of the ulcer can be documented and coded from nurse or other clinician notes.	
PDI 03	Retained Surgical Item or Unretrieved Device Fragment	Х	Foreign body intentionally left by surgeon should not be coded as "retained" foreign body.  Retained foreign body discovered and retrieved prior to the end of the surgical		

	PDI	POA Required	Miscoding	Lack of Coding Specificity	Measure Includes Only Elective Admissions
			episode should not be coded.		
PDI 05	latrogenic Pneumothorax	X	Pneumothoraces occurring during or immediately after a procedure are generally considered iatrogenic unless documented to be the result or component of an underlying clinical condition. Query the provider for clarification if needed.  Code any documented chest trauma, pleural effusion, and/or thoracic/chest procedures, including diagnostic procedures.  Do not code incidental findings of pneumothorax found on chest x-ray	Query for the etiology of pneumothorax if not documented: spontaneous, due to an underlying condition, disease, or injury or caused by medical intervention (iatrogenic).	
			unless the provider has documented the clinical significance.		
PDI 08	Perioperative Hemorrhage or Hematoma	Х	Need to distinguish between ecchymosis (flat bruising of the skin) and hematoma (bruising with mass).  Indicator requires diagnosis code and procedure code.	Differentiate between hemorrhage and expected intraop and postprocedural bleeding that is within normal for that specific procedure.	Х
			ICD-10-PCS root operation "control" is used for any circumstance of stopping or attempting to stop postprocedural bleeding. If the "control" procedure fails and a more definitive procedure is required to stop the bleeding, code only the definitive procedure (ICD-10-PCS Official Coding Guideline).		

	PDI	POA Required	Miscoding	Lack of Coding Specificity	Measure Includes Only Elective Admissions
			Hemorrhage cannot be coded from documented volume blood loss of any amount.		
PDI 09	Postoperative Respiratory Failure Rate	X	Postoperative respiratory failure is acute in nature and thus is classified as acute J95.821 or acute and chronic combined J95.822.  Coding should distinguish between respiratory insufficiency and respiratory failure (UHC Documentation Guide Post-Operative Respiratory Failure). Intubation and mechanical ventilation utilized during surgery should not be coded. Code ventilation that is continued in the postoperative period only when the provider indicates that there is reason to keep the patient intubated and ventilated longer than usual in the postoperative period. Code all reintubation that occurs after surgery and extubation.	The coder should never assume a diagnosis of respiratory failure without a documented diagnosis by the physician. If there are clinical indicators of failure, query the provider for clarification.	X
PDI 10	Postoperative Sepsis	Х	Negative or inconclusive blood cultures do not preclude a diagnosis of sepsis in patients with clinical evidence of the condition; however, the provider should be queried (CDC Official Coding Guideline).	When coding severe sepsis, remember that any organ dysfunction or failure should be associated with or due to the sepsis; if the relationship is not clear, query the provider.	X
PDI 11	Postoperative Wound Dehiscence Rate	Х	Depth of the wound dehiscence: external/superficial vs. internal/deep should be documented and coded accordingly. Internal involves the	Code the specific anatomical layers repaired (e.g., skin, subcutaneous tissue, fascia, muscle, or deeper tissues or	

	PDI	POA Required	Miscoding	Lack of Coding Specificity	Measure Includes Only Elective Admissions
DDI 40			abdominal fascial or muscle layer and deeper.	structures). The procedure codes in the general anatomical regions or body systems should only be used when the procedure is performed on an anatomical region rather than a specific body part or on the rare occasion when no information is available to support assignment of a code to a specific body part (ICD-10-PCS Official Coding Guidelines).	
PDI 12	Central Venous Catheter- Related Bloodstream Infections (CV-CRBI)		Bloodstream infections from peripheral lines may be miscoded as central lines; the distinction is made by the location of the end of catheter tip (peripheral vs. central vein), not the insertion site.  Assign the correct seventh digit character "A" if the infection is being actively treated regardless of number of encounters or providers that have treated the infection. Assign the correct seventh digit character "D" for infections previously treated and undergoing only routine care or monitoring and followup.	Central line infections can be localized to skin and subcutaneous tissues (T80212A), bloodstream infection (T80211A), or other and unspecified (T80218A, T80219A). If the type and/or location is not evident, query provider for clarification.	
PDI 13	Transfusion Reaction	Х	Transfusion reactions cannot be coded from nurse or other nonprovider notes. The reaction must be documented by a treating provider.		

<sup>\*</sup>NQI 01, NQI 02, NQI 03, PDI 6, and PDI 7 are not included in this table as there were no specific coding issues to highlight.

Table 4. Coding Issues Pertaining to Each Patient Safety Indicator

	PSI	POA Required	Miscoding	Lack of Coding Specificity	Measure Includes Only Elective Admissions
PSI 02	Death in Low-Mortality Diagnosis-Related Groups		Correct coding of principal diagnosis that leads to correct DRG assignment is essential.		
PSI 03	Pressure Ulcer	X	"Unspecified stage" and "unstageable" are not interchangeable terms; the code for unspecified stage should be used when the stage of the ulcer is not documented or is unknown; unstageable should be used when the stage cannot be clinically determined.  If the ulcer progresses from one stage to another higher stage during the encounter, code should be assigned based on the highest stage documented and assigned a POA indicator of "N" for Not present on admission (Official Coding Guideline).	Provider must document the diagnosis/ condition of pressure ulcer and the site; the stage of the ulcer can be coded from nursing or other ancillary notes.	
PSI 04	Death Rate Among Surgical Inpatients With Serious Treatable Complications		Code all coexisting conditions and comorbidities, both acute and chronic, that meet the criteria for a reportable diagnosis.	Include coding of comorbidities to more accurately capture the rate (Rosen, et al., 2006; Talsma, et al., 2008).	
PSI 05	Retained Surgical Item or Unretrieved Device Fragment	Х	Foreign body intentionally left by surgeon should not be coded as a retained foreign body. Retained foreign body discovered and retrieved prior to the end of the surgical episode should not be coded.		
PSI 06	latrogenic Pneumothorax	Х	Pneumothoraces occurring during or immediately after a procedure are generally considered iatrogenic unless documented to be the result or	Query for the etiology of pneumothorax if not documented: spontaneous, due to an underlying condition, disease, or	

	PSI	POA Required	Miscoding	Lack of Coding Specificity	Measure Includes Only Elective Admissions
			component of an underlying clinical condition. Query the provider for clarification if needed.  Code any documented chest trauma, pleural effusion, and/or thoracic/chest procedures, including diagnostic procedures.  Do not code incidental findings of pneumothorax found on chest x-ray unless the provider has documented the clinical significance.	injury or caused by medical intervention (iatrogenic).	
PSI 07	Central Venous Catheter- Related Bloodstream Infections (CV-CRBI)	X	Bloodstream infections from peripheral lines may be miscoded as central lines; the distinction is made by the location of the end of catheter tip (peripheral vs. central vein), not the insertion site.  Assign the correct seventh digit character "A" if the infection is being actively treated regardless of number of encounters or providers that have treated the infection. Assign the correct seventh digit character "D" for infections previously treated and undergoing only routine care or monitoring and followup.	Central line infections can be localized to skin and subcutaneous tissues (T80212A), bloodstream infection (T80211A), or other and unspecified (T80218A, T80219A). If the type and/or location is not evident query provider for clarification.	
PSI 08	Postoperative Hip Fracture	Х	Be sure to code any current cancer, including metastatic or lymphoid cancer.		
PSI 09	Perioperative Hemorrhage or Hematoma	Х	Need to distinguish between ecchymosis (flat bruising of the skin) and hematoma (bruising with mass).  Indicator requires diagnosis code and	Differentiate between hemorrhage and expected intraop and postprocedural bleeding that is within normal for that specific procedure.	Х

PSI		POA Required	Miscoding	Lack of Coding Specificity	Measure Includes Only Elective Admissions
			procedure code.  ICD-10-PCS root operation "control" is used for any circumstance of stopping or attempting to stop postprocedural bleeding. Should the "control" procedure fail and a more definitive procedure be required to stop the bleeding, code only the definitive procedure (ICD-10-PCS Official Coding Guideline).  Hemorrhage cannot be coded from documented volume blood loss of any amount.		
PSI 10	Postoperative Physiologic and Metabolic Derangement	Х	Code coexisting conditions, such as CKD, AMI, cardiac arrhythmias, shock, GI hemorrhage, perioperative hemorrhage.  Document any dialysis performed; hemodialysis or peritoneal.		Х
PSI 11	Postoperative Respiratory Failure	X	Postoperative respiratory failure is acute in nature and thus is classified as acute J95.821 or acute and chronic combined J95.822.  Coders should distinguish between respiratory insufficiency and respiratory failure (UHC Documentation Guide Post-Operative Respiratory Failure).  Intubation and mechanical ventilation utilized during surgery should not be coded. Code ventilation that is continued		X

PSI		POA Required	Miscoding	Lack of Coding Specificity	Measure Includes Only Elective Admissions
			in the postoperative period only when the provider indicates that there is reason to keep the patient intubated and ventilated longer than usual in the postoperative period. Code all reintubations that occur after surgery and extubation.		
PSI 12	Perioperative Pulmonary Embolism or Deep Vein Thrombosis (DVT)	Х	DVT/PE prophylaxis can be mistaken for treatment of confirmed DVT/PE; query for the reason therapeutic vs. prophylactic if not evident in the documentation.	Venous embolism default codes to "acute"; query provider if clinical indication is that of a chronic condition.	
PSI 13	Postoperative Sepsis	X	Negative or inconclusive blood cultures do not preclude a diagnosis of sepsis in patients with clinical evidence of the condition, but the provider should be queried (CDC Official Coding Guideline).	When coding severe sepsis, remember that any organ dysfunction or failure should be associated with or due to the sepsis; if the relationship is not clear, query the provider.	X
PSI 14	Postoperative Wound Dehiscence	X	Depth of the wound dehiscence: external/superficial vs. internal/deep should be documented and coded accordingly. Internal involves the abdominal fascial or muscle layer and deeper.	Code the specific anatomical layers repaired (e.g. skin, subcutaneous tissue, fascia muscle, or deeper tissues or structures). The procedure codes in the general anatomical regions or body systems should only be used when the procedure is performed on an anatomical region rather than a specific body part or on the rare occasion when no information is available to support assignment of a code to a specific body part (ICD-10-PCS Official Coding Guidelines).	
PSI 15	Accidental Puncture or	Х	Chart reviews have found cases	Occasionally, intraoperative	

PSI		POA Required	Miscoding	Lack of Coding Specificity	Measure Includes Only Elective Admissions
	Laceration		incorrectly coded as PSI that were actually due to normal operative conduct, disease-related lesion, or complication other than accidental puncture or laceration (bleeding, infection, dislodgement of a gastronomy tube, or fracture).	bleeding or other routine events are coded as accidental puncture or laceration. Clarify whether lacerations are unintended or an integral part of a procedure, such as to facilitate access to the surgical site in cases of unusual anatomy or extensive disease.	
PSI 16	Transfusion Reaction	X	Transfusion reactions cannot be coded from nurse or other nonprovider notes. The reaction must be documented by a treating provider.		
PSI 18 PSI 19	OB Trauma – Vaginal Delivery With Instrument OB Trauma – Vaginal Delivery Without Instrument		Distinguish between episiotomy (incision intentionally made) and lacerations. Be sure the degree of laceration documented corresponds to the repairs made.  Be sure that a coded delivery diagnosis is accompanied by codes for delivery procedure and outcome.  Repair of third and fourth degree lacerations requires a minimum of 2-3		