*AHRQ Quality Indicators*[TM]

# PEDIATRIC QUALITY INDICATORS (PDI), LOG OF ICD-9-CM, ICD-10-CM/PCS, AND DRG CODING UPDATES AND REVISIONS TO PDI DOCUMENTATION AND SOFTWARE
## Through Version 7.0

**September 2017**

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**AHRQ Quality Indicators<sup>TM</sup>**

**Pediatric Quality Indicators (PDI), Log of ICD-10-CM/procedure and DRG Coding Updates and Revisions to PDI Documentation and Software**

# 1.0 Log of ICD-09 CM, ICD-10-CM/PC, and MS-DRG Coding Updates and Revisions to PDI Specifications Documentation and Software

The following table summarizes the revisions made to the Pediatric Quality Indicators (PDI) software, software documentation and the technical specification documents in ICD-9-CM and ICD-10-CM/PCS version v7.0. It also reflects changes to indicator specifications based on updates to ICD-09-CM and ICD-10-CM/PCS codes through Fiscal Year 2016 (effective October 1, 2015) and incorporates coding updates that were implemented in both versions of the PDI software (both SAS and Windows).

The table lists the version and revision number, the date the revision was made, the component(s) affected by the change and a short summary of the changes that were made. The nature of the change is categorized as:

1) **Fiscal year (FY) coding change:** occurs because of changes to the most recent fiscal year codes dictated by the Centers for Disease Control and Prevention (CDC) National Center for Health Statistics (NCHS) and Centers for Medicare & Medicaid Services (CMS)

2) **Specification/ Calculation change**: may impact the measure result that is something other than the most recent fiscal year coding change

3) **Software/documentation change**: alteration to the software code to calculate the measure as specified, or to the documentation to clarify the measure intent or functionality.

For convenience and ease of use, the changes are listed in reverse chronological order with the most recent changes appearing first in the table. Please note that changes prior to version 4.4 are not classified according to the currently defined types of changes. In addition, each type of change has varied shading to enhance readability.

All changes noted below have been incorporated into the software programming code, software documentation and the PDI technical specifications. With this software update, the PDI software now incorporates ICD-9-CM, ICD-10 CM/PC, and DRG/MS-DRG codes valid from October 1, 1994 through September 30, 2016.

*The transition from ICD-9-CM to ICD-10-CM/PCS represents substantial differences across the two code sets. Specifications have been carefully reviewed to achieve as much consistency as possible; however, differences are expected to exist between the ICD-9-CM v5.0, the previous version of the AHRQ QI measures, and the ICD-10-CM/PCS release of v6.0. A detailed explanation of the process of conversion is detailed in*
*http://www.qualityindicators.ahrq.gov/Downloads/Resources/Publications/2013/C.14.10.D001_REVISED.pdf*

*Note: the change log for v6.0 (ICD-10) reflects the changes from v5.0 alpha version of ICD-10 software and not the changes from v5.0 ICD-9-CM version.*

| VERSION/REVISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| v7.0 (ICD-10) for SAS QI & WinQI | September 2017 | NQI 01 | Specification/ Calculations | **Description:**<br>The following codes were removed from THORAIP in ICD-10:<br>0JH604Z Insertion of Pacemaker, Single Chamber into Chest Subcutaneous Tissue and Fascia, Open Approach<br>0JH634Z Insertion of Pacemaker, Single Chamber into Chest Subcutaneous Tissue and Fascia, Percutaneous Approach<br>0JH804Z Insertion of Pacemaker, Single Chamber into Abdomen Subcutaneous Tissue and Fascia, Open Approach<br>0JH834Z Insertion of Pacemaker, Single Chamber into Abdomen Subcutaneous Tissue and Fascia, Percutaneous Approach<br><br>**Rational for the change:**<br>These codes were left in the logic of PDI 05/NQI 01 due to a GEM mapping error and should be removed because they do not put patients at an increased risk of an iatrogenic pneumothorax, unlike diaphragmatic pacemaker insertion procedures that may involve entering the pleural space. |
| v7.0 (ICD-10) | July 2017 | NQI 03 | Specification/ Calculations | **Description:**<br>Respecified numerator to require an organism code only for diagnoses without an organism integrated into the code.<br><br>**Rational for the change:**<br>P36 codes (except P36.8) have an organism integrated into the code, and do not allow for a separate organism code. The former definition would miss a majority of neonatal sepsis cases. |
| v7.0 (ICD-10) | July 2017 | NQI 03 | Specification/ Calculations | **Description:**<br>Removed redundant exclusion for sepsis.<br><br>**Rational for the change:**<br>All codes are included in a separate exclusion for sepsis for ICD-10. (BSI4DX). |

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|---|---|---|---|---|
| v7.0 (ICD-10) | July 2017 | NQI 03 | Specification/Calculations | **Description:** Reduce the length of stay exclusion from < 7 days to < 3 days. **Rational for the change:** This change harmonizes with The Joint Commission measure of neonatal sepsis. |
| v7.0 (ICD-10) | July 2017 | PDI 01 | Specification/Calculation | **Description:** Updated codes for spine procedures for existing denominator exclusion. **Rational for the change:** Annual coding update. |
| v7.0 (ICD-10) | July 2017 | PDI 02 | Specification/Calculation | **Description:** An exclusion for severe burns (≥20% body surface area) was added to the denominator for the ICD-10 version of PDI02. **Rational for the change:** Patients with severe burns are at an increased risk for skin breakdown and already receive intensive skin care as a result of their burn-related injury. Despite best efforts, progression to stage III or IV pressure ulcers may be largely unpreventable, which is inconsistent with the intent of PDI02 to capture preventable hospital-acquired pressure ulcers. |
| v7.0 (ICD-10) | July 2017 | PDI 02 | Specification/Calculation | **Description:** PDI 02 denominator exclusions were removed for the following procedures and conditions in ICD-10: pedicle graft procedures, and major skin disorders. Exclusions for patients admitted from acute hospitals or SNFs/ICFs were also removed in the ICD-10 version of PDI 02. **Rational for the change:** Before POA reporting was required, these conditions and procedures potentially associated with pressure ulcers were assumed to indicate that the pressure injury was POA. Therefore, exclusions for these conditions and procedures served as a means of removing events that might not be attributable to hospitals. However, now that POA status is required, these exclusions are redundant and lead to undercounting of hospital-acquired pressure ulcers. |

| VERSION/RE VISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| v7.0 (ICD-10) | July 2017 | PDI 05 | Specification/Calculation | **Description:** The following codes were removed from THORAIP in ICD-10: 0JH604Z Insertion of Pacemaker, Single Chamber into Chest Subcutaneous Tissue and Fascia, Open Approach 0JH634Z Insertion of Pacemaker, Single Chamber into Chest Subcutaneous Tissue and Fascia, Percutaneous Approach 0JH804Z Insertion of Pacemaker, Single Chamber into Abdomen Subcutaneous Tissue and Fascia, Open Approach 0JH834Z Insertion of Pacemaker, Single Chamber into Abdomen Subcutaneous Tissue and Fascia, Percutaneous Approach.<br><br>**Rational for the change:** These codes were left in the logic of PDI 05 due to a GEM mapping error and should be removed because they do not put patients at an increased risk of an iatrogenic pneumothorax, unlike diaphragmatic pacemaker insertion procedures that may involve entering the pleural space. |
| v7.0 (ICD-10) | July 2017 | PDI 08 | Specification/Calculation | **Description:** Antineoplastic chemotherapy induced pancytopenia and other disorders impacting coagulation were added to the definition of platelet disorders for the purpose of excluding patients in the ICD-10 version of PDI 08. **Rational for the change:** As an antiplatelet disorder, patients with antineoplastic chemotherapy induced pancytopenia have a higher risk for a PDI 08 event and should consequently be excluded from the measure. Other disorders can decrease coagulation. |
| v7.0 (ICD-10) | July 2017 | PDI 08 | Specification/Calculation | **Description:** Updated procedure codes for control of hemorrhage or drainage of hematoma<br><br>**Rational for the change:** Annual coding update. |
| v7.0 (ICD-10) | July 2017 | PDI 08 | Specification/Calculation | **Description:** Updated codes to capture postprocedural hemorrhage and hematoma **Rational for the change:** Annual coding update. |

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|---|---|---|---|---|
| v7.0 (ICD-10) | July 2017 | PDI 09 | Specification/Calculation | **Description:** Revise the list of procedures performed to correct craniofacial anomalies that would involve an inherent risk of airway compromise (addressed by prolonged intubation to protect the airway). **Rational for the change:** More specific procedure codes in ICD-10-PCS permit a more tailored denominator exclusion based on the procedures that involve airway compromise requiring extended intubation. |
| v7.0 (ICD-10) | July 2017 | PDI 09 | Specification/Calculation | **Description:** Removed exclusion for gastrectomy. **Rational for the change:** Patients with gastrectomy are not at higher risk for respiratory failure |
| v7.0 (ICD-10) | July 2017 | PDI 09 | Specification/Calculation | **Description:** Removed logic that required cranial procedures to be accompanied by a craniofacial anomaly dx code. **Rational for the change:** Craniofacial anomalies place patients at high risk for extended intubation regardless of the procedure performed. |
| V7.0 (ICD-10) | July 2017 | PDI 10 | Specification/Calculation | **Description:** Updated codes for infection in existing denominator exclusion. **Rational for the change:** Annual coding update |
| V7.0 (ICD-10) | July 2017 | PDI 10 | Specification/Calculation | **Description:** Removed software code assigning cases to Risk category 5 **Rational for the change:** Patients in DRGs in surgical class 4 are not eligible for this measure. |
| V7.0 (ICD-10) | July 2017 | PDI 11 | Specification/Calculation | **Description:** Added large number of additional abdominopelvic procedure codes to the denominator of PDI11. **Rational for the change:** Codes were unintentionally omitted from Version 6.0. |

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|---|---|---|---|---|
| V7.0 (ICD-10) | July 2017 | PDI 11 | Specification/Calculation | **Description:**<br>Updated codes for transplant procedures in existing denominator exclusion.<br><br>**Rational for the change:**<br>Annual coding update. |
| V7.0 (ICD-10) | July 2017 | PDI 11 | Specification/Calculation | **Description:**<br>Updated codes for denominator specification of abdominal procedures<br><br>**Rational for the change:**<br>Annual coding update. |
| V7.0 (ICD-10) | July 2017 | PDI 11 | Specification/Calculation | **Description:**<br>Updated codes for immunocompromised diagnoses in existing denominator exclusion.<br><br>**Rational for the change:**<br>Annual coding update |
| V7.0 (ICD-10) | July 2017 | PDI 11 | Specification/Calculation | **Description:**<br>Updated codes for immunocompromised diagnoses in existing denominator exclusion.<br><br>**Rational for the change:**<br>Annual coding update. |
| V7.0 (ICD-10) | July 2017 | PDI 11 | Specification/Calculation | **Description:**<br>Applied stratification of denominator by open vs. laparoscopic (including all non-open approaches). This resulted in the setname for abdominopelvic procedures (ABDOMI14P) split into two setnames (ABDOMIPOPEN and ABDOMIPOTHER)<br><br>**Rational for the change:**<br>Laparoscopic procedures have lower risk of dehiscence |
| V7.0 (ICD-10) | July 2017 | PDI 12 | Specification/Calculation | **Description:**<br>Updated codes for transplant procedures in existing stratification criterion.<br><br>**Rational for the change:**<br>Annual coding update. |

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|---|---|---|---|---|
| V7.0 (ICD-10) | July 2017 | PDI 12 | Specification/Calculation | **Description:**<br>Updated codes for immunocompromised diagnoses in existing stratification criterion.<br><br>**Rational for the change:**<br>Annual coding update. |
| V7.0 (ICD-10) | July 2017 | PDI 12 | Specification/Calculation | **Description:**<br>Updated codes for immunocompromised diagnoses in existing stratification criterion.<br><br>**Rational for the change:**<br>Annual coding update. |
| V7.0 (ICD-10) | July 2017 | PDI 12 | Specification/Calculation | **Description:**<br>Updated codes for cancer in existing stratification criterion.<br><br>**Rational for the change:**<br>Annual coding update. |
| V7.0 (ICD-10) | July 2017 | PDI 14 | Specification/Calculation | **Description:**<br>Updated diagnosis codes for cystic fibrosis and anomalies of respiratory system diagnoses.<br><br>**Rational for the change:**<br>Annual coding update. |
| V7.0 (ICD-10) | July 2017 | PDI 15 | Specification/Calculation | **Description:**<br>Removed codes E10.65 and E11.65 from numerator.<br><br>**Rational for the change:**<br>Changes in coding clinic rulings has clarified that Type II diabetes with ketoacidosis can be coded with just one diagnosis code. Codes E10.65 and E11.65 now more likely represent non-DKA admissions classifiable to PQI 14 (adults only). |

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| V7.0 (ICD-10) | July 2017 | PDI 16 | Specification/Calculation | **Description:**<br>Updated diagnosis code for gastroenteritis<br><br>**Rational for the change:**<br>Annual coding update. |
| V7.0 (ICD-10) | July 2017 | PDI 16 | Specification/Calculation | **Description:**<br>Updated diagnosis code for gastrointestinal disorders<br><br>**Rational for the change:**<br>Annual coding update. |
| V7.0 (ICD-10) | July 2017 | PDI 18 | Specification/Calculation | **Description:**<br>Updated codes for transplant procedures in existing denominator exclusion.<br>**Rational for the change:**<br>Annual coding update. |
| V7.0 (ICD-10) | July 2017 | PDI 18 | Specification/Calculation | **Description:**<br>Updated codes for immunocompromised diagnoses in existing denominator exclusion.<br><br>**Rational for the change:**<br>Annual coding update. |
| V7.0 (ICD-10) | July 2017 | PDI 18 | Specification/Calculation | **Description:**<br>Updated codes for immunocompromised diagnoses in existing denominator exclusion.<br><br>**Rational for the change:**<br>Annual coding update. |
| V7.0 (ICD-10) | July 2017 | PDI 11 | Specification/Calculations | **Description:**<br>Revised logic for exclusion of abdominopelvic procedures that occur prior to reclosures.<br><br>**Rational for the change:**<br>Logic incorrectly included cases with a third abdominopelvic procedure (index, reclosure and a third procedure). This has been fixed. |

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| V7.0 (ICD-10) | July 2017 | PDI 11 | Specification/Calculation | **Description:**<br>Update diagnosis codes for kidney or urinary tract disorder diagnosis codes.<br><br>**Rational for the change:**<br>Annual coding update. |
| V7.0 (ICD-10) | July 2017 | PDI | Specification/Calculation | **Description:**<br>Update ORPROC<br><br>**Rational for the change:**<br>Annual coding update. |
| V7.0 (ICD-10) | July 2017 | All modules | Specification/Calculation | **Description:**<br>Remove risk adjustment variables and associated code.<br><br>**Rational for the change:**<br>Risk adjustment variables and associated code were removed from all modules, as risk adjustment is not presently available in the ICD10 v7.00 software. |
| V7.0 (ICD-10) | July 2017 | All modules | Specification/Calculations | **Description:**<br>Changed structure for one MDRGs: acute myocardial infarction.<br><br>**Rational for the change:**<br>Root MS-DRGs are structured by mortality and as mortality may be related to the numerator event, this MS-DRGs was combined with the corresponding MS-DRG for patients discharged alive. |
| V6.0.2 (ICD-9) | August 2017 | All PDI, PQI 09, and PSI 17 module programs | Software /Documentation | **Description:**<br>Update all program names and internal libref and macros<br><br>**Rational for the change:**<br>Software cleanup |
| V6.0.2 (ICD-9) | August 2017 | PDI All | Software /Documentation | **Description:**<br>Corrected reference population to include 34 states (previous estimates mistakenly based on 33 states). Risk adjustment models were recreated, and updated coefficients, signal variance, and reference arrays were included in the revised software<br>**Rational for the change:**<br>One state mistakenly omitted from the reference population. |

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| V6.0.2 (ICD-9) | August 2017 | PDI All | Software /Documentation | **Description:** Algorithm added to assign MDC based on principal diagnosis to align with CMS regulation.<br><br>**Rational for the change:** CMS requires MDC to be assigned based on principal diagnosis rather than MS-DRG assignment. Doing so will assign MDCs for discharges assigned to "Pre-MDC" MS-DRGs. |
| V6.0.2 (ICD-9) | August 2017 | PDI All | Software /Documentation | **Description:** Modified code in PROV_RISKADJ to prevent the SUMWGT warning from being triggered.<br><br>**Rational for the change:** The warning was inconsequential but may be confusing to users. |
| V6.0.2 (ICD-9) | August 2017 | PDI All | Software /Documentation | **Description:** Removed formats that are no longer used in the PDI algorithms or risk adjustment.<br><br>**Rational for the change:** Software code clean-up. |
| V6.0.2 (ICD-9) | August 2017 | PDI All | Software /Documentation | **Description:** Implemented PDI 06 risk model described in Jenkins et al. 2016. Development and Validation of an Agency for Healthcare Research and Quality Indicator for Mortality After Congenital Heart Surgery Harmonized With Risk Adjustment for Congenital Heart Surgery (RACHS-1) Methodology. J Am Heart Assoc. 5(5).<br><br>**Rational for the change:** This risk model resulted from harmonization across organizations. |
| V6.0.2 (ICD-9) | August 2017 | PDI All | Software /Documentation | **Description:** Updated risk model with variable selection and coefficients.<br>**Rational for the change:** Revision of the risk models with updates to the risk model variables and systematic model builds. |

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| V6.0.2 (ICD-9) | August 2017 | PDI All | Software /Documentation | **Description:**<br>MDRG length increased from 3 to 4 bytes<br><br>**Rational for the change:**<br>Fixed error that resulted in truncation of some MDRGs. |
| V6.0.2 (ICD-9) | August 2017 | PDI All | Software /Documentation | **Description:**<br>Updated signal variance and population rate arrays<br>**Rational for the change:**<br>Annual update. |
| V6.0.2 (ICD-9) | August 2017 | PDI All | Software /Documentation | **Description:**<br>Changed structure for two MDRGs: acute myocardial infarction and neonates died or transferred.<br><br>**Rational for the change:**<br>Root MS-DRGs are structured by mortality and as mortality may be related to the numerator event, these MS-DRGs were combined with the corresponding MS-DRG for patients discharged alive. |
| V6.0.2 (ICD-9) | August 2017 | PDI All | Software /Documentation | **Description:**<br>Updated age and age and sex variables, removed interaction effects from provider level variables.<br><br>**Rational for the change:**<br>Updates better reflect clinical risk factors related to age and gender. |
| V6.0.2 (ICD-9) | August 2017 | PDI All | Software /Documentation | **Description:**<br>Updated candidate MDRG variables in risk model, removed specific variables potentially related to the outcomes of interest.<br><br>**Rational for the change:**<br>MDRGs may be related to the outcome and should not be adjusted for. |

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| V6.0.2 (ICD-9) | August 2017 | PDI All | Software /Documentation | **Description:**<br>Add external composite weights file<br><br>**Rational for the change:**<br>This change was added to improve production processes. |
| V6.0.2 (ICD-9) | August 2017 | PDI All | Software /Documentation | **Description:**<br>Rename SEXCAT covariates.<br><br>**Rational for the change:**<br>Sex covariate renamed from SEXCAT to GENDER_CAT to avoid namespace collision with the strata class variable SEXCAT. |
| V6.0.2 (ICD-9) | August 2017 | PDI All | Software /Documentation | **Description:**<br>Update POVCAT format used for Area Risk Adjustment<br><br>**Rational for the change:**<br>Update POVCAT using census ACS data 5 year estimate using definition in STATA file. Implement in software and provide documentation of variable. Document/notate development program used to update POVCAT |
| V6.0.2 (ICD-9) | August 2017 | PDI All | Software /Documentation | **Description:**<br>Update ORPROC list to exclude "0094", "0110", "0116", "0117", "5013"<br><br>**Rational for the change:**<br>Remove codes for procedures that are no longer designated as major OR procedures in ORPROC. |
| V6.0.2 (ICD-9) | August 2017 | PDI All | Software /Documentation | **Description:**<br>Update ORPROC list to add "1481", "1482","1483"<br><br>**Rational for the change:**<br>Add codes inadvertently omitted from ORPROC. |

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|---|---|---|---|---|
| V6.0.2 (ICD-9) | August 2017 | PDI All | Software /Documentation | **Description:** Removed formats that are no longer used in the PDI algorithms or risk adjustment.<br><br>**Rational for the change:** Software code clean-up. |
| V6.0.2 (ICD-9) | August 2017 | PDI All | Software /Documentation | **Description:** Revise exclusion for craniofacial anomalies and head procedures in PDI 09 to exclude any procedures from expanded list of head and neck procedures or any diagnosis of craniofacial anomalies.<br><br>**Rational for the change:** Modified exclusion criteria simplify the exclusions. |
| V6.0.2 (ICD-9) | August 2017 | PDI All | Software /Documentation | **Description:** Removed gastric resection procedures as an exclusion for PDI 09.<br><br>**Rational for the change:** Gastric exclusions usually do not result in excess risk. |
| V6.0.2 (ICD-9) | August 2017 | PDI All | Software /Documentation | **Description:** Fix error that triggers exclusion of patients with umbilical hernia repair only when procedure day is missing.<br><br>**Rational for the change:** Software fix. |
| V6.0.2 (ICD-9) | August 2017 | PDI All | Software /Documentation | **Description:** Update risk variables and coefficients<br><br>**Rational for the change:** Annual update |

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|---|---|---|---|---|
| V6.0.2 (ICD-9) | August 2017 | PDI All | Software /Documentation | **Description:** Added new comorbidity risk categories for obesity (moved into separate variable), ventilator dependence, adverse neonatal conditions.<br><br>**Rational for the change:** Clinically significant comorbidity categories added or separated from other comorbidities categories. |
| V6.0.2 (ICD-9) | August 2017 | PDI All | Software /Documentation | **Description:** Added an alternative definition of transfer-in for newborns.<br><br>**Rational for the change:** Newborn admissions receive different point of origin codes than non-newborn admissions. |
| V6.0.2 (ICD-9) | August 2017 | PDI All | Software /Documentation | **Description:** Updated indicator names in program comments.<br><br>**Rational for the change:** Software cleanup. |
| V6.0.2 (ICD-9) | August 2017 | PDI All | Software /Documentation | **Description:** Updated macros and POVCAT in PQI 09 standalone program.<br><br>**Rational for the change:** Annual update |
| V6.0.2 (ICD-9) | August 2017 | PDI All | Software /Documentation | **Description:** Updated macros and POVCAT in PSI 17 standalone program.<br><br>**Rational for the change:** Annual update. |

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|---|---|---|---|---|
| V6.0.2 (ICD-9) | August 2017 | PDI 08 | Software /Documentation | **Description:**<br>Removed exclusion of records from denominator with hip fracture repair as the first or only OR procedure.  With the inclusion of "present on admission" criteria it is no longer necessary to focus on surgical patients to avoid false positives.<br><br>**Rational for the change:**<br>Date of hip fracture repair is empirically not associated with reported POA status. |
| V6.0.2 (ICD-9) | August 2017 | PDI 02 | Software /Documentation | **Description:**<br>Changed exclusion for length of stay from less than 5 days to less than 3 days.<br><br>**Rational for the change:**<br>Source of false negatives and long length of stay potentially redundant with "present on admission". |
| V6.0.2 (ICD-9) | August 2017 | PDI 05 | Software /Documentation | **Description:**<br>Restricted the chest trauma exclusion to rib fractures, traumatic pneumothorax and related chest wall injuries that are associated with "difficult-to-detect" or nascent pneumothorax.<br><br>**Rational for the change:**<br>Not all chest traumas are associated with pneumothoraxes. |
| V6.0.2 (ICD-9) | August 2017 | PDI 09 | Software /Documentation | **Description:**<br>Expanded exclusion for acute posttraumatic or postoperative respiratory failure present on admission to include other etiologies of acute respiratory failure.<br><br>**Rational for the change:**<br>Other etiologies of respiratory failure require exclusion. |

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| V6.0.2 (ICD-9) | August 2017 | PDI 10 | Software /Documentation | **Description:**<br>Removed exclusion for length of stay less than 4 days.<br><br>**Rational for the change:**<br>Exclusion less necessary due to present on admission data. |
| V6.0.2 (ICD-9) | August 2017 | PDI 11 | Software /Documentation | **Description:**<br>Added exclusion for diagnosis of "disruption of internal operation wound" that is present on admission to denominator.<br><br>**Rational for the change:**<br>Implementing standard exclusion |
| V6.0.2 (ICD-9) | August 2017 | PDI All | Software /Documentation | **Description:**<br>Added 46.97 to the definition of immunocompromised state procedures (Added $IMMUNIP, exists in $TRANSPP). IMMUNE flag added to PDI.<br><br>**Rational for the change:**<br>Unintentionally omitted in previous versions. |
| V6.0.2 (ICD-9) | August 2017 | PDI 09 | Software /Documentation | **Description:**<br>Changed name of PRESOPP set name for PDI to PRESOPP_PDI<br><br>**Rational for the change:**<br>Distinguish from IQI PRESOPP format. |
| V6.0.2 (ICD-9) | August 2017 | PDI 02 | Software /Documentation | **Description:**<br>Removed MDC 09 exclusion. Added new exclusion for any diagnosis code POA using new formats, PUXD; EXFOLIATXD, which includes all codes listed on tabs "#272 PU EXCL" and "#272 EXFOLIATION BSA" in specifications.<br><br>**Rational for the change:**<br>Removed MDC 09 exclusion. Added focused exclusion for major skin disorders that are associated with higher risk of pressure ulcer. |

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|---|---|---|---|---|
| V6.0.2 (ICD-9) | August 2017 | PDI 09 | Software /Documentation | **Description:**<br>Added exclusion of hospitalizations with any procedure code for lung transplantation. New format, LUNGTRANSP, per tab "294 Lung Transplant" in specifications.<br><br>**Rational for the change:**<br>Added exclusion of hospitalizations involving lung transplantation. |
| V6.0.2 (ICD-9) | August 2017 | PDI 02 | Software /Documentation | **Description:**<br>Modified logic to also include cases with 2 or more qualifying codes in format DECUBVD, when at least one of those are not POA.<br><br>**Rational for the change:**<br>Modified logic to also include cases with 2 or more qualifying pressure ulcers, when at least one of the ulcers are not POA. |
| V6.0.2 (ICD-9) | August 2017 | PDI All | Software /Documentation | **Description:**<br>Updated MS-DRG list to account for FY2016 changes.<br><br>**Rational for the change:**<br>Annual update. |
| V6.0.2 (ICD-9) | August 2017 | PDI All | Software /Documentation | **Description:**<br>Updated MS-DRG list to account for FY2016 changes.<br><br>**Rational for the change:**<br>Annual update. |
| V6.0.2 (ICD-9) | August 2017 | PDI All | Software /Documentation | **Description:**<br>Updated MS-DRG list to account for FY2016 changes.<br><br>**Rational for the change:**<br>Annual update. |

| VERSION/RE VISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| V6.0.2 (ICD-9) | August 2017 | PDI 08 | Software /Documentation | **Description:**<br>Aligned definitions of hemorrhage and hematoma procedures within PDI 08**.**<br><br>**Rational for the change:**<br>Previous versions had multiple, largely overlapping lists of hemorrhage control procedures. |

| VERSION/RE VISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| v6.0 (ICD-10) | July 2016 | PDI All | Software /Documentation | **Description:**<br>Length of the MDRG variable increased from 3 to 4 bytes to allow for additional value.<br><br>**Rational for the change:**<br>The current software assigned a length=3 for the MDRG variable, which limited values to 3 bytes, or integers with a maximum value of 8,192. The peculiar consequence is that 8898 and 8899 were lumped together. |
| v6.0 (ICD-10) | July 2016 | PDI All | Software /Documentation | **Description:**<br>Changed number of MDRG "Other" from 8898 to 9999<br><br>**Rational for the change:**<br>Cleans up MDRG list |
| v6.0 (ICD-10) | July 2016 | PDI All | Software /Documentation | **Description:**<br>Updated MS-DRG list to account for FY2016 changes.<br><br>**Rational for the change:**<br>Update DRG lists for FY 16 changes |

| VERSION/RE VISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| v6.0 (ICD-10) | July 2016 | PDI All | Software /Documentation | **Description:**<br>Updated OR procedure list to account for FY2016 changes.<br><br>**Rational for the change:**<br>Updated OR procedure list to account for FY2016 changes. |
| v6.0 (ICD-10) | July 2016 | PDI All | Software /Documentation | **Description:**<br>Remove former DRG classification from software, include only MS-DRG in software.<br><br>**Rational for the change:**<br>The DRG classification system has been replaced, and the inclusion of both the DRG and MSDRG classification system is confusing to users. |
| v6.0 (ICD-10) | July 2016 | PDI 02 | Specification/Calculation | **Description:**<br>Changed exclusion for length of stay from less than 5 days to less than 3 days. Source of false negatives and long length of stay potentially redundant with "present on admission".<br><br>**Rational for the change:**<br>This exclusion is >87% POA-enhanced, and thus appears largely redundant with POA reporting |
| v6.0 (ICD-10) | July 2016 | PDI 02 | Specification/Calculation | **Description:**<br>Removed MDC 09 exclusion. Added focused exclusion for major skin disorders that are associated with higher risk of pressure ulcer.<br><br>**Rational for the change:**<br>Some skin disorders put patients at greater risk for skin breakdown (e.g. Epidermolysis Bullosa). These types of skin disorders could lead to greater rates of decubitus ulcers and secondary complications in this patient group. Redundant with POA reporting |

**AHRQ Quality Indicators**<sup>TM</sup>
**Pediatric Quality Indicators (PDI), Log of ICD-10-CM/procedure and DRG Coding Updates and Revisions to
PDI Documentation and Software**

| VERSION/RE VISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| v6.0 (ICD-10) | July 2016 | PDI 05 | Specification/Calculation | **Description:**<br>Restricted the chest trauma exclusion to rib fractures, traumatic pneumothorax and related chest wall injuries that are associated with "difficult-to-detect" or nascent pneumothorax.<br><br>**Rational for the change:**<br>Chest trauma, in general, shows no evidence of POA enhancement (i.e., 14% POA), so the exclusion does not appear to have its intended effect. |
| v6.0 (ICD-10) | July 2016 | PDI 02, 08, 09, 10, NQI 03 | Specification/Calculation | **Description:**<br>Revised OR Procedure list to remove known instances where procedures are not typically performed in an operating room. These changes result in the AHRQ QI OR procedure list not being aligned with the CMS OR Procedure list.<br><br>**Rational for the change:**<br>CMS OR procedure list contains some common procedures that are not typically performed in the OR, and as a result these cases are incorrectly pushed into a surgical PSI denominator. |
| v6.0 (ICD-10) | July 2016 | PDI 08 | Specification/Calculation | **Description:**<br>Removed selected procedures that have weak connections with diagnosis or treatment of perioperative hemorrhage or hematoma from the numerator inclusion list. This was a source of false positives.<br><br>**Rational for the change:**<br>Source of false positives, because users are reporting cases in which the triggering procedure is unrelated to perioperative hemorrhage or hematoma, and therefore cannot be used as a severity marker. |
| v6.0 (ICD-10) | July 2016 | PDI 09 | Specification/Calculation | **Description:**<br>Expanded exclusion for acute postraumatic or postoperative respiratory failure present on admission to include other etiologies of acute respiratory failure.<br><br>**Rational for the change:**<br>ARF of any cause POA obviates the usefulness of postoperative ARF as a quality indicator; users report some false positives for this reason. |

| VERSION/RE VISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| v6.0 (ICD-10) | July 2016 | PDI 09 | Specification/Calculation | **Description:** Added exclusion of hospitalizations involving lung transplantation.<br><br>**Rational for the change:** We are seeing where cystic fibrosis patients having both bilateral lung transplant along with liver transplant are qualifying for PSI-11-Perioperative Respiratory Failure when the payor is Blue Cross/Blue Shield since it goes to an APR-DRG and not an MS-DRG. Specifically, the principal diagnosis for the hospitalization in question plays an important role in MS-DRG assignment, which affects which MDC applies. In general, it would not be appropriate to exclude all hospitalizations involving a diagnosis of cystic fibrosis because we would not want to assume that all (or most) cases of postoperative respiratory failure in this subpopulation are non-preventable.  However, exclusion of hospitalizations involving lung transplantation (33.5x) seems reasonable and appropriate. |
| v6.0 (ICD-10) | July 2016 | PDI 10 | Specification/Calculation | **Description:** Removed exclusion for length of stay less than 4 days. Exclusion less necessary due to present on admission data.<br><br>**Rational for the change:** Consistency with PSI 13; stratification appears to enhance the apparent benefit of LOS exclusion in identifying events that were actually POA (i.e., 62% vs 21% POA among non-elective clean operations, which are excluded from PSI 13) |
| v6.0 (ICD-10) | July 2016 | PDI 11 | Specification/Calculation | **Description:** Added exclusion for diagnosis of "disruption of internal operation wound" that is present on admission to denominator.<br><br>**Rational for the change:** Would presumably reduce FPs due to operative repair a dehiscent wound from a prior operation (but no validation evidence) |

| VERSION/REVISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| V5.0 | March 2015 | Neonatal Iatrogenic Pneumothorax Rate (NQI 02) | Specification/Calculation | The exclusion for polycystic kidney disease was corrected from autosomal dominant (753.13) to autosomal recessive (753.14). |
| V5.0 | March 2015 | Accidental Puncture or Laceration Rate (PDI 01) | Specification/Calculation | E-codes (E870.x) were removed from the numerator and denominator. |
| V5.0 | March 2015 | Accidental Puncture or Laceration Rate (PDI 01) | Specification/Calculation | The code for insertion of recombinant BMP (84.52) was removed from the denominator exclusion for spine surgery. |
| V5.0 | March 2015 | Pressure Ulcer Rate (PDI 02) | Specification/Calculation | Records with any secondary diagnosis of pressure ulcer present on admission and any secondary diagnosis of pressure ulcer stage III or IV or unstageable present on admission were dropped from the denominator exclusion definition. |
| V5.0 | March 2015 | Retained Surgical Item or Unretrieved Device Fragment Count (PDI 03) | Specification/Calculation | E-codes (E870.x) were removed from the numerator and denominator. |
| V5.0 | March 2015 | Perioperative Hemorrhage or Hematoma Rate (PDI 08) | Specification/Calculation | Setnames HEMATIP, HEMORIP and HEMOTHP were consolidated into one set for "Control of perioperative hemorrhage and evacuation of hematoma". The procedure code for endovascular embolization or occlusion of vessel(s) of the head or neck using bioactive coils (39.76) and the codes for uterine art embolization with or without coils (68.24, 68.25) were added to the denominator code set for the Perioperative Hemorrhage or Hematoma Rate measure. |
| V5.0 | March 2015 | Perioperative Hemorrhage or Hematoma Rate (PDI 08) | Specification/Calculation | Setnames POHMAID and POHMRID were consolidated into one set for "Perioperative Hemorrhage or Hematoma" (998.11, 998.12). |
| V5.0 | March 2015 | Perioperative Hemorrhage or Hematoma Rate (PDI 08) | Specification/Calculation | The denominator exclusion for coagulopathy (COAGDID, 286.0-286.4, 286.52, 286.59, 286.6, 286.7, 286.9) was removed in favor of the existing stratification approach. |

| VERSION/REVISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| V5.0 | March 2015 | Postoperative Respiratory Failure Rate (PDI 09) | Specification/Calculation | The code for temporary tracheostomy (31.1) was added to the definition of tracheostomy. |
| V5.0 | March 2015 | Postoperative Respiratory Failure Rate (PDI 09) | Specification/Calculation | The denominator exclusion for Gingivoplasty (24.2) was removed. A denominator exclusion for facial bone operations (76.31, 76.39, 76.41-76.45, 76.61-76.64, 76.7x, 76.92-76.99). was added.<br>A denominator exclusion for laryngo-tracheal operations (31.0, 31.61-31.64,31.71-31.72, 31.91-31.95) was added.<br>Setnames for laryngeal, pharyngeal, facial, and nose/mouth procedures were consolidated. |
| V5.0 | March 2015 | Postoperative Respiratory Failure Rate (PDI 09) | Specification/Calculation | The code for senility (old age) without psychosis (797) was removed from the denominator exclusion for "degenerative neurological disorder". |
| V5.0 | March 2015 | Postoperative Respiratory Failure Rate (PDI 09) | Specification/Calculation | The denominator exclusion for lung cancer surgery was expanded to include thoracoscopic surgery (32.30, 32.41, 32.50). |
| V5.0 | March 2015 | Postoperative Respiratory Failure Rate (PDI 09) | Specification/Calculation | The denominator exclusion for esophagal surgery was expanded to include esophagostomy (42.10, 42.11, 42.12, 42.19). |
| V5.0 | March 2015 | Postoperative Sepsis Rate (PDI 10) | Specification/Calculation | The code for postoperative shock N.O.S. (998.00) was removed from the numerator and denominator definitions for Postoperative Sepsis Rate. |
| V5.0 | March 2015 | Postoperative Wound Dehiscence Rate (PDI 11) | Specification/Calculation | The code for transplant of intestine (46.97) was added to the denominator exclusion for transplant procedures. |
| V5.0 | March 2015 | Central Venous Catheter-Related Blood Stream Infection Rate (PDI 12) | Specification/Calculation | The code for transplant of intestine (46.97) was added to the denominator stratification for "high-risk" transplant procedures. |
| V5.0 | March 2015 | Transfusion Reaction Count (PDI 13) | Specification/Calculation | The code for mismatched blood transfusion (E8760) was removed from the numerator and denominator definitions for Transfusion Reaction |

| VERSION/REVISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| | | | | Count. |
| V5.0 | March 2015 | Gastroenteritis Admission Rate (PDI 16) | Specification/Calculation | The diagnosis code for amebic nondysenteric infection (006.2) was removed from the denominator exclusion for "bacterial gastroenteritis". |
| V5.0 | March 2015 | PDSASA3 | Specification/Calculation | Age/Sex risk-adjustment models were updated with the 2012 reference population file; the code was revised to use new regression coefficients. |
| V5.0 | March 2015 | PDSASP3 | Specification/Calculation | Risk adjustment models were updated using the 2012 reference population file; The code was revised to use new regression coefficients. |
| V5.0 | March 2015 | PDSAS1 | Specification/Calculation | The macro code that uses POA values to identify conditions present on admission was revised to only use POA as indicated on the input file. The user must indicate if the input file includes POA data. |
| V5.0 | March 2015 | PDSASP2 | Specification/Calculation | The code for T flags for the POA to SAS1 program was adjusted. |
| V5.0 | March 2015 | PDI Composite | Specification/Calculation | Weights for the measures that make up the Composite measure were updated using the 2012 reference population. |
| V5.0 | March 2015 | All PDI | Specification/Calculation | The reference population was updated based on 2012 HCUP SIDS data. |
| V5.0 | March 2015 | All PDI | Specification/Calculation | The population file was updated with US Census County estimates for 2014. |
| V4.5a | July 2014 | PDI 06 | Specification/Calculation | A software bug was fixed that will once again allow reporting of the expected, risk adjusted and smoothed rates for PDI 06. |

| V4. 5a | July 2014 | PDI 06 | Specification/Calculation | Numerator exclusion based on patent ductus arteriosus (PDA) and any-listed ICD-9-CM procedure codes for catheterization without any-listed ICD-9-CM procedure codes for extracorporeal circulation is changed so that the definition of PDA can include atrial septal defect or ventricular septal defect |
| V4. 5a | July 2014 | PDI 07 | Specification/Calculation | Numerator exclusion based on patent ductus arteriosus (PDA) and any-listed ICD-9-CM procedure codes for catheterization withouth any-listed ICD-9-CM procedure codes for extracorporeal circulation is changed so that the definition of PDA can include atrial septal defect or ventricular septal defect |
| V4. 5a | July 2014 | PDI 09 | Specification/Calculation | A bug in the PDFMY.SAS program was fixed that could affect the calculations for PDI 09 |
| V4. 5a | July 2014 | All PDIs | Software (WinQI, V4.6) | A denominator adjustment added to SAS for Version 4.4 has been added to WinQI. This applies to the census population counts when certain combinations of strata are zero. |
| V4.5a | July 2014 | All PDIs | Software (SAS, V4.5a) | To improve the output of results in a better format, the PROC MEANS statement was modified. |

| VERSION/ REVISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| V4.5 | May 2013 | All area PDI | Specification/Calculation | Updated data are used for population estimates (i.e., through 2013). The population data are used to calculate the denominator for the area-level QI. |
| V4.5 | May 2013 | All PDI | Specification/Calculation | Updated reference population rates were calculated using 44 state files from the 2010 State Inpatient Databases (SID). New risk adjustment coefficients were calculated using the updated reference population. |
| V4.5 | May 2013 | Neonatal Blood Stream Infection Rate (NQI 3) | Specification/Calculation | 1. Add numerator inclusion codes for any secondary diagnosis of methicillin resistant staphylococcus aureus septicemia to Criteria #1: <br> 03812    METH RES STAPH AUR SEPT <br><br> 2. Drop numerator inclusion code for secondary diagnosis of (non-neonatal) bacteremia from Criteria #2: <br> 7907    BACTEREMIA <br><br> 3. Add numerator inclusion codes for secondary diagnosis of methicillin resistant staphylococcus aureus and Escherichia coli infection to Criteria #3: <br> 04112    MTH RES STAPH AUR <br> 04141    SHIGA TOXIN-PROD E. COLI <br> 04142    SPEC SHIGA TOXIN-PROD E. COLI OTH <br> 04143    SHIGA TOXIN-PROD E. COLI UNS <br> 04149    SHIGA TOXIN-PROD E. COLI OTH/UNS <br><br> 4. Drop denominator inclusion for transfers into an acute care facility (DISP=2) <br><br> 5. Add denominator inclusion for transfers from another healthcare facility within two days of birth <br><br> 6. Add denominator exclusion codes for selected principal diagnosis of sepsis or bacteremia or secondary diagnosis present on admission of sepsis or bactermia: <br> 04104    ENTEROCOCCUS GROUP D <br> 04110    STAPHYLOCOCCUS UNSPCFIED <br> 04111    MTH SUS STPH AUR ELS/NOS <br> 04112    MTH RES STAPH AUR |

| VERSION/ REVISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| | | | | 04119    OTHER STAPHYLOCOCCUS<br>0413    KLEBSIELLA PNEUMONIAE<br>0414    E. COLI INFECT NOS<br>04141    SHIGA TOXIN-PROD E. COLI<br>04142    SPEC SHIGA TOXIN-PROD E. COLI OTH<br>04143    SHIGA TOXIN-PROD E. COLI UNS<br>04149    SHIGA TOXIN-PROD E. COLI OTH/UNS<br>0417    PSEUDOMONAS INFECT NOS<br>04185    OTH GRAM NEGATV BACTERIA<br>1125    DISSEMINATED CANDIDIASIS<br>77181    SEPTICEMIA OF NEWBORN<br>77183    BACT OF NEWBORN<br><br>7. Add denominator exclusion codes for principal diagnosis (or secondary diagnosis present on admission only for those cases qualifying for the numerator) for sepsis or bacteremia:<br>1125    DISSEMINATED CANDIDIASIS<br>77181    SEPTICEMIA OF NEWBORN<br>77183    BACT OF NEWBORN<br>7907    BACTEREMIA<br><br>8. Drop denominator exclusion codes for principal diagnosis of infection or secondary diagnosis present on admission:<br>PDI Appendix H – Infection Diagnosis Codes<br><br>9. Drop denominator exclusion for length of stay less than 2 days<br><br>10. Add denominator exclusion for length of stay less than 7 days |

| VERSION/ REVISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| V4.5 | May 2013 | Postoperative Hemorrhage or Hematoma Rate (PDI 8) | Specification/Calculation | 1. Add denominator exclusion codes for any diagnosis code of coagulation disorder:<br>2860    CONG FACTOR VIII DISORDER<br>2861    CONG FACTOR IX DISORDER<br>2862    CONG FACTOR XI DISORDER<br>2863    CONG DEF CLOT FACTOR NEC<br>2864    VON WILLEBRAND'S DISEASE<br>28652    ACQUIRED HEMOPHILIA<br>28659    OT HEM D/T CIRC ANTICOAG<br>2866    DEFIBRINATION SYNDROME<br>2867    ACQ COAGUL FACTOR DEF<br>2869    COAGUL DEFECT NEC NOS<br><br>2. Add numerator inclusion codes for miscellaneous hemorrhage or hematoma-related procedures:<br>Codes listed in Appendix C |
| V4.5 | May 2013 | All mortality PDI and Postoperative Wound Dehiscence Rate (PDI 11) | Specification/Calculation | Modify the parameters in the analysis module for measures that are never present on admission (this is, where P=0 for all cases) by increasing the estimated precision threshold, i.e., modify the precision parameter in the analysis module to less than $1 \times 10^9$. This changed only affected the software. The user will not see the change in parameters as they are embedded in the regression intercept and coefficients that are used by the prediction module.<br><br>Rationale: Effect will be to change the reference population rate used for shrinkage to be closer to empirically estimated reference population rate given P=0. |
| V4.5 | May 2013 | All PDI | Software/Documentation | Respiratory complications diagnosis codes – Corrections were made to assure that three specific diagnosis codes were present in both the SAS and WinQI software. This change only affected the software. |

| VERSION/ REVISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| V4.5 | May 2013 | All PDI | Software/Documentation | In WinQI there was an error in the smoothed rate calculation involving the noise variance and signal variance. This error was not previously observed because it only became significant in particular cases with relatively unusual variances. This issue was fixed in WinQI Version 4.5. |
| V4.5 | May 2013 | All PDI | Software/Documentation | The variable DISCWT in SAS QI v4.5 was set equal to 1 and the variable DISCWT was removed from the KEEP statement associated with the input file. This change ensures that the SAS programs do not account for complex sampling design when calculating QI estimates and standard errors. The SAS QI software, beginning with Version 4.1, does not support weighted QI estimates or standard errors for weighted estimates. The WinQI software has never supported weighted QI estimates or standard errors for weighted estimates. |
| V4.5 | May 2013 | All PDI | Software/Documentation | The definitions of Newborn and Outborn were revised in WinQI to better align them with SAS. The differences affected cases where discharge records have some combinations of missing values for one or more of the required data fields (e.g., Age, Age in Days). |
| V4.5 | May 2013 | All PDI | Software/Documentation | The installation packages have been improved for Version 4.5 of the SAS and WinQI software, including the Prediction Module and 3M™ APR DRG software. Both the SAS and WinQI software are available in Version 4.5 as either 32-bit or 64-bit applications. The 32-bit applications are targeted for Windows XP operating systems, and the 64-bit applications are targeted for Windows 7 operating systems. |

| VERSION/ REVISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| V4.5 | May 2013 | All PDI | Software/Documentation | The WinQI software was was corrected to address the following issues:<br><br>1. On Step 2 of the Sampling Wizard dialog, the Sample Data File text box was not working correctly. Users were not able to save the file specified using the Browse explorer function. This issue has been fixed in WinQI Version 4.5.<br><br>2. Denominators were not being adjusted (i.e., dividing by the number of discharge quarters) when the calculations were being stratified by quarter. This issue has been fixed in WinQI Version 4.5.<br><br>3. On the WinQI Additional Options for Data Analysis screen of the Report Wizard, if the "*Ref. Pop. Rate*" is deselected, and then the expected rate and O/E ratio are reported incorrectly. These rates should be disabled on this screen if "*Ref. Pop. Rate*" is not selected. This issue has been included in the software documentation.<br><br>4. The compiled C# program was named AHRQ.exe, and this was the same name used for the compiled Prediction Module C++ program. This potential conflict has been fixed in WinQI Version 4.5.<br><br>5. Excel files with an .xlsx extension were not recognized. MS Access file types also needed to be updated. These issues were fixed in WinQI Version 4.5. |
| V4.5 | May 2013 | Neonatal Blood Stream Infection Rate (NQI 3) | Software/Documentation | 1. WinQI was mistakenly including the operating room procedure code 640 which only applies to adults. And, SAS was not consistently excluding this code for all pediatric indicators and cases. This issue was fixed in SAS and WinQI Version 4.5. This change only affected the software.<br><br>2. WinQI was mistakenly allowing some adult discharges to be included in the QI calculations in cases where the discharge record presents contradictory information about patient age and admission type. Specifically, software testing found that some adult discharge records include Newborn admission type. WinQI was fixed to make sure these adult cases are properly excluded from any pediatric indicator calculations. |

| VERSION/ REVISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| V4.5 | May 2013 | Volume of Foreign Body Left during Procedure (PDI 3) | Software/Documentation | Rename indicator to "Retained Surgical Item or Unretrieved Device Fragment Count."  This change only affected  the documentation.<br><br>Rationale: NQF measure refinements agreed upon with the Surgery Endorsement Maintenance 2010 Steering Committee |
| V4.5 | May 2013 | Iatrogenic Pneumothorax Rate (PDI 5) | Software/Documentation | 1. Add denominator exclusion codes for any cardiac procdure:<br>3597     PERC MTRL VLV REPR W IMP<br>3737     EXC/DEST HRT LES, THRSPC<br>This change only affected the documentation. |
| V4.5 | May 2013 | Pediatric Heart Surgery Mortality Rate (PDI 6) | Software/Documentation | Rename indicator to "RACHS-1 Pediatric Heart Surgery Mortality Rate." This change only affected  the documentation.<br><br>Rationale: NQF measure refinements agreed upon with the Surgery Endorsement Maintenance 2010 Steering Committee |
| V4.5 | May 2013 | Pediatric Heart Surgery Volume (PDI 7) | Software/Documentation | Rename indicator to "RACHS-1 Pediatric Heart Surgery Volume." This change only affected  the documentation.<br><br>Rationale: NQF measure refinements agreed upon with the Surgery Endorsement Maintenance 2010 Steering Committee |

| VERSION/ REVISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| V4.5 | May 2013 | Postoperative Hemorrhage or Hematoma Rate (PDI 8) | Software/Documentation | 1. Rename indicator to "Perioperative Hemorrhage or Hematoma Rate." This change only affected the documentation.<br><br>Rationale: Cases identified included adverse events that occur both peri-and post-operatively<br><br>2. For the denominator exclusion criterion that excludes cases where the procedure of interest occurs before the first operating room procedure, explicitly say that a secondary diagnosis for postoperative hemorrhage or postoperative hematoma must also be present in the discharge record for the record to be excluded. This change only affected the documentation.<br><br>3. WinQI was mistakenly including the operating room procedure code 640 which only applies to adults. And, SAS was not consistently excluding this code for all pediatric indicaators and cases. This issue was fixed in SAS and WinQI Version 4.5. This change only affected the software. |
| V4.5 | May 2013 | Postoperative Respiratory Failure Rate (PDI 9) | Software/Documentation | 1. Added the following codes to Neruomuscular disorder diagnosis codes:<br>35921    MYOTONIC MUSCULAR DYSTRPHY<br>35929    OTHER MYOTONIC DISORDER<br>This changed affected both the software and documentation.<br><br>2. Added the following code to Esophageal resection procedure codes in the technical specification (as it should have been included):<br>4399    TOTAL GASTRECTOMY NEC<br>This changed only affected the documentation. |
| V4.5 | May 2013 | Transfusion Reaction Volume (PDI 13) | Software/Documentation | Rename indicator to "Transfusion Reaction Count." This changed only affected the documentation. |
| V4.5 | May 2013 | Urinary Tract Infection Admission Rate (PDI 18) | Software/Documentation | Add numerator exclusion codes for any diagnosis of kidney/urinary tract disorder:<br>59000    CHR PYELONEPHRITIS NOS<br>59001    CHR PYELONEPH W MED NECR<br>This change only affected the documentation. |

| VERSION/ REVISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| V4.4 | March 2012 | All Area PDI | Specification/Calculation | Updated data are used for population estimates (i.e., through 2012). The population data are used to calculate the denominator for the area-level QI. The comparative data tables have been updated using Version 4.4 of the software. Because the risk adjustment models and reference population have not changed for Version 4.4, the Risk Adjustment Coefficients remain as they were in Version 4.3. |
| V4.4 | March 2012 | Accidental Puncture or Laceration Rate (PDI 1) | FY Coding Change | Add denominator inclusion for surgical MS-DRGs (PDI Appendix C)<br><br>Add code:<br>16 AUTOLOGOUS BONE MARROW TRANSPLANT W CC/MCC<br>17 AUTOLOGOUS BONE MARROW TRANSPLANT W/O CC/MCC<br>570 SKIN DEBRIDEMENT W MCC<br>571 SKIN DEBRIDEMENT W CC<br>572 SKIN DEBRIDEMENT W/O CC/MCC |

AHRQ Quality Indicators<sup>TM</sup>
**Pediatric Quality Indicators (PDI), Log of ICD-10-CM/procedure and DRG Coding Updates and Revisions to PDI Documentation and Software**

| VERSION/ REVISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| V4.4 | March 2012 | Pressure Ulcer Rate (PDI 2) | FY Coding Change | 1. Add/remove denominator inclusion for operating room procedure codes (PDI Appendix A)<br><br>Add code:<br>0221 INSERT/REPLACE EVD<br>0222 INTRCRAN VENT SHUNT/ANAS<br>1267 INSERT AQUEOUS DRAIN DEV<br>1753 PERC ATHER EXTRACRAN VSL<br>1754 PERC ATHER INTRACRAN VSL<br>1755 TRANSLUM COR ATHERECTOMY<br>1756 ATHER OTH NON-VOR VESSEL<br>3500 CLOSED VALVOTOMY NOS<br>3505 ENDOVAS REPL AORTC VALVE<br>3506 TRNSAPCL REP AORTC VALVE<br>3507 ENDOVAS REPL PULM VALVE<br>3508 TRNSAPCL REPL PULM VALVE<br>3509 ENDOVAS REPL UNS HRT VLV<br>3826 INSRT PRSR SNSR W/O LEAD<br>3977 TEMP ENDOVSC OCCLS VESSL<br>3978 ENDOVAS IMPLN GRFT AORTA<br>4382 LAP VERTICAL GASTRECTOMY<br>6824 UTERINE ART EMB W COILS<br>6825 UTERINE ART EMB W/O COIL<br><br>Remove code:<br>0058 INS INTRA-ANSM PRES MNTR<br>0059 INTRAVASC MSMNT COR ART<br>0067 INTRAVAS MSMNT THORC ART<br>0068 INTRAVAS MSMT PERIPH ART<br>0069 INTRAVS MSMT VES NEC/NOS |

| VERSION/ REVISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| | | | | 2. Add denominator includion for surgical MS-DRGs (PDI Appendix C)<br><br>Add code:<br>16   AUTOLOGOUS BONE MARROW TRANSPLANT W CC/MCC<br>17   AUTOLOGOUS BONE MARROW TRANSPLANT W/O CC/MCC<br>570 SKIN DEBRIDEMENT W MCC<br>571 SKIN DEBRIDEMENT W CC<br>572 SKIN DEBRIDEMENT W/O CC/MCC |
| V4.4 | March 2012 | Volume of Foreign Body Left During Procedure (PDI 3) | FY Coding Change | Add denominator inclusion for surgical MS-DRGs (PDI Appendix C)<br><br>Add code:<br>16   AUTOLOGOUS BONE MARROW TRANSPLANT W CC/MCC<br>17   AUTOLOGOUS BONE MARROW TRANSPLANT W/O CC/MCC<br>570 SKIN DEBRIDEMENT W MCC<br>571 SKIN DEBRIDEMENT W CC<br>572 SKIN DEBRIDEMENT W/O CC/MCC |
| V4.4 | March 2012 | Iatrogenic Pneumothorax Rate (PDI 5) | FY Coding Change | 1. Add denominator exclusions for cardiac procedure<br>Add code:<br>3506 TRNSAPCL REP AORTC VALVE<br>3508 TRNSAPCL REPL PULM VALVE<br><br>2. Add denominator inclusion for surgical MS-DRGs (PDI Appendix C)<br><br>Add code:<br>16   AUTOLOGOUS BONE MARROW TRANSPLANT W CC/MCC<br>17   AUTOLOGOUS BONE MARROW TRANSPLANT W/O CC/MCC<br>570 SKIN DEBRIDEMENT W MCC<br>571 SKIN DEBRIDEMENT W CC<br>572 SKIN DEBRIDEMENT W/O CC/MCC |

| VERSION/ REVISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| V4.4 | March 2012 | Pediatric Heart Surgery Mortality Rate (PDI 6) | FY Coding Change | 1. Add denominator inclusions for procedures to repair congenital heart defect<br><br>Add code:<br>3500 CLOSED VALVOTOMY NOS<br>3505 ENDOVAS REPL AORTC VALVE<br>3506 TRNSAPCL REP AORTC VALVE<br>3507 ENDOVAS REPL PULM VALVE<br>3508 TRNSAPCL REPL PULM VALVE<br><br>2. Add denominator inclusions for diagnosis of congenital heart disease<br><br>Add code:<br>74731 PULMON ART COARCT/ATRES<br>74732 PULMONARY AV MALFORMATN<br>74739 OTH ANOM PUL ARTERY/CIRC |
| V4.4 | March 2012 | Pediatric Heart Surgery Volume (PDI 7) | FY Coding Change | 1. Add numerator inclusions for procedures to repair congenital heart defect<br><br>Add code:<br>3500 CLOSED VALVOTOMY NOS<br>3505 ENDOVAS REPL AORTC VALVE<br>3506 TRNSAPCL REP AORTC VALVE<br>3507 ENDOVAS REPL PULM VALVE<br>3508 TRNSAPCL REPL PULM VALVE<br><br>2. Add numerator inclusion for diagnosis of congenital heart disease<br><br>Add code:<br>74731 PULMON ART COARCT/ATRES<br>74732 PULMONARY AV MALFORMATN<br>74739 OTH ANOM PUL ARTERY/CIRC |

| VERSION/ REVISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| V4.4 | March 2012 | Postoperative Hemorrhage or Hematoma Rate (PDI 8) | FY Coding Change | 1. Add stratification high risk inclusion codes for coagulopathies to high risk group<br><br>Add code:<br>28652 ACQUIRED HEMOPHILIA<br>28653 ANTIPHOSPHOLIPID W HEMOR<br>28659 OT HEM D/T CIRC ANTICOAG<br><br>2. Add/remove denominator inclusion for operating room procedure codes (PDI Appendix A)<br><br>Add code:<br>0221 INSERT/REPLACE EVD<br>0222 INTRCRAN VENT SHUNT/ANAS<br>1267 INSERT AQUEOUS DRAIN DEV<br>1753 PERC ATHER EXTRACRAN VSL<br>1754 PERC ATHER INTRACRAN VSL<br>1755 TRANSLUM COR ATHERECTOMY<br>1756 ATHER OTH NON-VOR VESSEL<br>3500 CLOSED VALVOTOMY NOS<br>3505 ENDOVAS REPL AORTC VALVE<br>3506 TRNSAPCL REP AORTC VALVE<br>3507 ENDOVAS REPL PULM VALVE<br>3508 TRNSAPCL REPL PULM VALVE<br>3509 ENDOVAS REPL UNS HRT VLV<br>3826 INSRT PRSR SNSR W/O LEAD<br>3977 TEMP ENDOVSC OCCLS VESSL<br>3978 ENDOVAS IMPLN GRFT AORTA<br>4382 LAP VERTICAL GASTRECTOMY<br>6824 UTERINE ART EMB W COILS<br>6825 UTERINE ART EMB W/O COIL |

| VERSION/ REVISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| | | | | Remove code: |
| | | | | 0058 INS INTRA-ANSM PRES MNTR |
| | | | | 0059 INTRAVASC MSMNT COR ART |
| | | | | 0067 INTRAVAS MSMNT THORC ART |
| | | | | 0068 INTRAVAS MSMT PERIPH ART |
| | | | | 0069 INTRAVS MSMT VES NEC/NOS |
| | | | | |
| | | | | 3. Add denominator inclusion for surgical MS-DRGs (PDI Appendix C) |
| | | | | |
| | | | | Add code: |
| | | | | 16   AUTOLOGOUS BONE MARROW TRANSPLANT W CC/MCC |
| | | | | 17   AUTOLOGOUS BONE MARROW TRANSPLANT W/O CC/MCC |
| | | | | 570 SKIN DEBRIDEMENT W MCC |
| | | | | 571 SKIN DEBRIDEMENT W CC |
| | | | | 572 SKIN DEBRIDEMENT W/O CC/MCC |

AHRQ Quality Indicators<sup>TM</sup>

**Pediatric Quality Indicators (PDI), Log of ICD-10-CM/procedure and DRG Coding Updates and Revisions to PDI Documentation and Software**

| VERSION/ REVISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| V4.4 | March 2012 | Postopertive Respiratory Failure Rate (PDI 9) | FY Coding Change | 1. Add numerator inclusions for diagnosis of acute respiratory failure<br><br>Add code:<br>51851 AC RESP FLR FOL TRMA/SRG<br>51853 AC/CHR RSP FLR FOL TR/SG<br><br>2. Remove numerator inclusions for diagnosis of acute respiratory failure<br><br>Remove code:<br>51881 ACUTE RESPIRATORY FAILURE<br>51884 ACUTE & CHRONC RESP FAIL<br><br>3. Add denominator exclusions for diagnosis of degenerative neurological disorder<br><br>Add code:<br>31081 PSEUDOBULBAR AFFECT<br>31089 NONPSYCH MNTL DISORD NEC<br>3316 CORTICOBASAL DEGENERATION<br>34882 BRAIN DEATH<br><br>4. Add denominator exclusions for diagnosis of neuromuscular disorders<br><br>Add code:<br>35830 LAMBERT-EATON SYND NOS<br>35831 LAMBERT-EATON SYND NEOPL<br>35839 LAMBERT-EATON SYN OT DIS |

| VERSION/ REVISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| | | | | 5. Add/remove denominator inclusion for operating room procedure codes (PDI Appendix A)<br><br>Add code:<br>0221 INSERT/REPLACE EVD<br>0222 INTRCRAN VENT SHUNT/ANAS<br>1267 INSERT AQUEOUS DRAIN DEV<br>1753 PERC ATHER EXTRACRAN VSL<br>1754 PERC ATHER INTRACRAN VSL<br>1755 TRANSLUM COR ATHERECTOMY<br>1756 ATHER OTH NON-VOR VESSEL<br>3500 CLOSED VALVOTOMY NOS<br>3505 ENDOVAS REPL AORTC VALVE<br>3506 TRNSAPCL REP AORTC VALVE<br>3507 ENDOVAS REPL PULM VALVE<br>3508 TRNSAPCL REPL PULM VALVE<br>3509 ENDOVAS REPL UNS HRT VLV<br>3826 INSRT PRSR SNSR W/O LEAD<br>3977 TEMP ENDOVSC OCCLS VESSL<br>3978 ENDOVAS IMPLN GRFT AORTA<br>4382 LAP VERTICAL GASTRECTOMY<br>6824 UTERINE ART EMB W COILS<br>6825 UTERINE ART EMB W/O COIL<br><br>Remove code:<br>0058 INS INTRA-ANSM PRES MNTR<br>0059 INTRAVASC MSMNT COR ART<br>0067 INTRAVAS MSMNT THORC ART<br>0068 INTRAVAS MSMT PERIPH ART<br>0069 INTRAVS MSMT VES NEC/NOS |

| VERSION/ REVISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| | | | | 6. Add denominator inclusion for surgical MS-DRGs (PDI Appendix C)<br><br>Add code:<br>16  AUTOLOGOUS BONE MARROW TRANSPLANT W CC/MCC<br>17  AUTOLOGOUS BONE MARROW TRANSPLANT W/O CC/MCC<br>570 SKIN DEBRIDEMENT W MCC<br>571 SKIN DEBRIDEMENT W CC<br>572 SKIN DEBRIDEMENT W/O CC/MCC |

| VERSION/ REVISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| V4.4 | March 2012 | Postoperative Sepsis Rate (PDI 10) | FY Coding Change | 1. Add denominator exclusions for diagnosis of infection (PDI Appendix H)<br><br>Add code:<br>04141 SHIGA TXN-PRODUCE E.COLI<br>04142 SHGA TXN PROD E.COLI NEC<br>04143 SHGA TXN PROD E.COLI NOS<br>04149 E.COLI INFECTION NEC/NOS<br>53901 INT D/T GASTRC BAND PROC<br>53981 INF D/T OT BARIATRC PROC<br>59681 INFECTION OF CYSTOSTOMY<br>99931 OTH/UNS INF-CEN VEN CATH<br>99932 BLOOD INF DT CEN VEN CTH<br>99933 LCL INF DT CEN VEN CTH<br>99934 AC INF FOL TRANS,INF BLD<br><br>2. Add code for high risk immunocompromised states (PDI Appendix F)<br><br>Add code:<br>996.88 COMP TP ORGAN-STEM CELL<br><br>3. Add numerator inclusions for diagnosis of sepsis<br><br>Add code:<br>99800 POSTOPERATIVE SHOCK, NOS<br>99802 POSTOP SHOCK, SEPTIC<br><br>4. Add code for intermediate risk immunocompromised states (PDI Appendix G):<br><br>Add code:<br>573.5  HEPATOPULMONARY SYNDROME |

| VERSION/ REVISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| | | | | 5. Remove numerator inclusion for diagnosis of sepsis<br><br>Remove code:<br>998.0 POSTOPERATIVE SHOCK, NOS<br><br>6. Add denominator inclusions operating room procedure codes (PDI Appendix A)<br><br>Add code:<br>0221 INSERT/REPLACE EVD<br>0222 INTRCRAN VENT SHUNT/ANAS<br>1267 INSERT AQUEOUS DRAIN DEV<br>1753 PERC ATHER EXTRACRAN VSL<br>1754 PERC ATHER INTRACRAN VSL<br>1755 TRANSLUM COR ATHERECTOMY<br>1756 ATHER OTH NON-VOR VESSEL<br>3500 CLOSED VALVOTOMY NOS<br>3505 ENDOVAS REPL AORTC VALVE<br>3506 TRNSAPCL REP AORTC VALVE<br>3507 ENDOVAS REPL PULM VALVE<br>3508 TRNSAPCL REPL PULM VALVE<br>3509 ENDOVAS REPL UNS HRT VLV<br>3826 INSRT PRSR SNSR W/O LEAD<br>3977 TEMP ENDOVSC OCCLS VESSL<br>3978 ENDOVAS IMPLN GRFT AORTA<br>4382 LAP VERTICAL GASTRECTOMY<br>6824 UTERINE ART EMB W COILS<br>6825 UTERINE ART EMB W/O COIL<br><br>Remove code:<br>0058 INS INTRA-ANSM PRES MNTR<br>0059 INTRAVASC MSMNT COR ART<br>0067 INTRAVAS MSMNT THORC ART<br>0068 INTRAVAS MSMT PERIPH ART<br>0069 INTRAVS MSMT VES NEC/NOS |

| VERSION/ REVISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| | | | | 7. Add denominator and stratification inclusion for surgical MS-DRGs (PDI Appendix C) <br><br> Add code: <br> 16  AUTOLOGOUS BONE MARROW TRANSPLANT W CC/MCC <br> 17  AUTOLOGOUS BONE MARROW TRANSPLANT W/O CC/MCC <br> 570 SKIN DEBRIDEMENT W MCC <br> 571 SKIN DEBRIDEMENT W CC <br> 572 SKIN DEBRIDEMENT W/O CC/MCC |

| VERSION/ REVISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| V4.4 | March 2012 | Postoperative Wound Dehiscence Rate (PDI 11) | FY Coding Change | 1. Add denominator inclusion for abdominopelvic procedures<br><br>Add code:<br>4382 LAP VERTICAL GASTRECTOMY<br><br>2. Add denominator exclusion for diagnosis of high-risk immunocompromised state (PDI Appendix F)<br><br>Add code:<br>28411 ANTIN CHEMOP INDCD PANCYT<br>28412 OTH DRG INDCD PANCYTOPNA<br>28419 OTHER PANCYTOPENIA<br>99688 COMP TP ORGAN-STEM CELL<br><br>3. Add denominator exclusion for diagnosis of intermediate-risk immunocompromised state (PDI Appendix G)<br><br>Add code:<br>5735 HEPATOPULMONARY SYNDROME<br><br>4. Add stratification inclusion for surgical MS-DRGs<br><br>Add code:<br>16  AUTOLOGOUS BONE MARROW TRANSPLANT W CC/MCC<br>17  AUTOLOGOUS BONE MARROW TRANSPLANT W/O CC/MCC<br>570 SKIN DEBRIDEMENT W MCC<br>571 SKIN DEBRIDEMENT W CC<br>572 SKIN DEBRIDEMENT W/O CC/MCC |

| VERSION/ REVISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| V4.4 | March 2012 | Central Venous Catheter-Related Blood Stream Infection Rate (PDI 12) | FY Coding Change | 1. Add numerator definition for diagnosis of central venous catheter-related blood stream infections diagnosed on or after October 1, 2011.<br>Add code:<br>99931 OTH/UNS INF-CEN VEN CATH<br>99932 BLOOD INF DT CEN VEN CTH<br><br>2. Add denominator inclusion for surgical MS-DRGs (PDI Appendix C)<br><br>Add code:<br>16   AUTOLOGOUS BONE MARROW TRANSPLANT W CC/MCC<br>17   AUTOLOGOUS BONE MARROW TRANSPLANT W/O CC/MCC<br>570 SKIN DEBRIDEMENT W MCC<br>571 SKIN DEBRIDEMENT W CC<br>572 SKIN DEBRIDEMENT W/O CC/MCC<br><br>3. Add denominator exclusion for diagnosis of high- risk immunocompromised state (PDI Appendix F)<br><br>Add code:<br>28411 ANTIN CHEMOP INDCD PANCYT<br>28412 OTH DRG INDCD PANCYTOPNA<br>28419 OTHER PANCYTOPENIA<br>99688 COMP TP ORGAN-STEM CELL<br><br>4. Add denominator exclusion for diagnosis of intermediate-risk immunocompromised state (PDI Appendix G)<br><br>Add code:<br>5735 HEPATOPULMONARY SYNDROME |

| VERSION/ REVISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| V4.4 | March 2012 | Transfusion Reaction Volume (PDI 13) | FY Coding Change | Add denominator inclusion for surgical MS-DRGs (PDI Appendix C)<br><br>Add code:<br>16  AUTOLOGOUS BONE MARROW TRANSPLANT W CC/MCC<br>17  AUTOLOGOUS BONE MARROW TRANSPLANT W/O CC/MCC<br>570 SKIN DEBRIDEMENT W MCC<br>571 SKIN DEBRIDEMENT W CC<br>572 SKIN DEBRIDEMENT W/O CC/MCC |
| V4.4 | March 2012 | Asthma Admission Rate (PDI 14) | FY Coding Change | Add denominator exclusion code for cystic fibrosis and anomalies of the respiratory system<br><br>Add code:<br>51661 NEUROEND CELL HYPRPL INF<br>51662 PULM INTERSTITL GLYCOGEN<br>51663 SURFACTANT MUTATION LUNG<br>51664 ALV CAP DYSP W VN MISALN<br>51669 OTH INTRST LUNG DIS CHLD |
| V4.4 | March 2012 | Urinary Tract Infection Admission Rate (PDI 18) | FY Coding Change | 1. Add denominator exclusion for diagnosis of high- risk immunocompromised state (PDI Appendix F)<br><br>Add code for high-risk:<br>28411 ANTIN CHEMOP INDCD PANCYT<br>28412 OTH DRG INDCD PANCYTOPNA<br>28419 OTHER PANCYTOPENIA<br>99688  COMP TP ORGAN-STEM CELL<br><br>2. Add denominator exclusion for diagnosis of intermediate-risk immunocompromised state (PDI Appendix G)<br><br>Add code for intermediate risk:<br>5735 HEPATOPULMONARY SYNDROME |

| VERSION/ REVISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| V4.4 | March 2012 | Neonatal Iatrogenic Pneumothorax Rate (NQI 1) | FY Coding Change | 1. Add denominator exclusion code for cardiac procedure<br><br>Add code:<br>3506 TRNSAPCL REP AORTC VALVE<br>3508 TRNSAPCL REPL PULM VALVE<br><br>2. Add denominator inclusion for surgical MS-DRGs (PDI Appendix C)<br><br>Add code:<br>16 AUTOLOGOUS BONE MARROW TRANSPLANT W CC/MCC<br>17 AUTOLOGOUS BONE MARROW TRANSPLANT W/O CC/MCC<br>570 SKIN DEBRIDEMENT W MCC<br>571 SKIN DEBRIDEMENT W CC<br>572 SKIN DEBRIDEMENT W/O CC/MCC |

AHRQ Quality Indicators<sup>TM</sup>

**Pediatric Quality Indicators (PDI), Log of ICD-10-CM/procedure and DRG Coding Updates and Revisions to PDI Documentation and Software**

| VERSION/ REVISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| V4.4 | March 2012 | Neonatal Blood Stream Infection Rate (NQI 3) | FY Coding Change | 1. Add denominator exclusions for diagnosis of infection (PDI Appendix H)<br><br>Add code:<br>04141 SHIGA TXN-PRODUCE E.COLI<br>04142 SHGA TXN PROD E.COLI NEC<br>04143 SHGA TXN PROD E.COLI NOS<br>04149 E.COLI INFECTION NEC/NOS<br>53901 INT D/T GASTRC BAND PROC<br>53981 INF D/T OT BARIATRC PROC<br>59681 INFECTION OF CYSTOSTOMY<br>99931 OTH/UNS INF-CEN VEN CATH<br>99932 BLOOD INF DT CEN VEN CTH<br>99933 LCL INF DT CEN VEN CTH<br>99934 AC INF FOL TRANS,INF BLD<br><br>2. Add denominator exclusions for diagnosis of sepsis<br><br>Add code:<br>99800 POSTOPERATIVE SHOCK, NOS<br>99802 SHOCK FOLLOW TRAUMA OR SURGERY, SEPTIC<br><br>3. Remove denominator exclusion for diagnosis of sepsis<br><br>Remove code:<br>9980 POSTOPERATIVE SHOCK |

| VERSION/ REVISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| | | | | 4. Add/remove denominator inclusion for Operating Room Procedure Codes (PDI Appendix A)<br><br>Add code:<br>0221 INSERT/REPLACE EVD<br>0222 INTRCRAN VENT SHUNT/ANAS<br>1267 INSERT AQUEOUS DRAIN DEV<br>1753 PERC ATHER EXTRACRAN VSL<br>1754 PERC ATHER INTRACRAN VSL<br>1755 TRANSLUM COR ATHERECTOMY<br>1756 ATHER OTH NON-VOR VESSEL<br>3500 CLOSED VALVOTOMY NOS<br>3505 ENDOVAS REPL AORTC VALVE<br>3506 TRNSAPCL REP AORTC VALVE<br>3507 ENDOVAS REPL PULM VALVE<br>3508 TRNSAPCL REPL PULM VALVE<br>3509 ENDOVAS REPL UNS HRT VLV<br>3826 INSRT PRSR SNSR W/O LEAD<br>3977 TEMP ENDOVSC OCCLS VESSL<br>3978 ENDOVAS IMPLN GRFT AORTA<br>4382 LAP VERTICAL GASTRECTOMY<br>6824 UTERINE ART EMB W COILS<br><br>Remove code:<br>0058 INS INTRA-ANSM PRES MNTR<br>0059 INTRAVASC MSMNT COR ART<br>0067 INTRAVAS MSMNT THORC ART<br>0068 INTRAVAS MSMT PERIPH ART<br>0069 INTRAVS MSMT VES NEC/NOS<br>6825 UTERINE ART EMB W/O COIL |
| V4.4 | March 2012 | Software | Software/ Documentation | Revised the data step of creating permanent data set containing all records which are deleted from the analysis because key variable values having missing data |

| VERSION/ REVISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| V4.4 | March 2012 | Software | Software/ Documentation | PDI 12: Modified inclusion logic to include time dependent logic to discharges before October 1, 2011 and after October 1, 2011 for central line-associated blood stream infection diagnosis codes |
| V4.4 | March 2012 | Software | Software/ Documentation | WinQI v4.3 and v4.4 do not check for a possible issue with user-defined composite weighting – users must set weights for all possible individual indicators, including zero weights for indicators that are not to be included in the composite. This requirement has been included in the software documentation. |
| V4.4 | March 2012 | Software | Software/ Documentation | PDI 09: Modified inclusion logic to include time dependent logic to discharges before October 1, 2011 and after October 1, 2011 for acute Respiratory Failure diagnosis codes |
| V4.4 | March 2012 | Software | Software/ Documentation | Both SAS and WinQI v4.3 were improperly truncating the (Observed rate)/(Expected rate) ratio and associated upper confidence bound (95%) to be <= 1.0 in cases where a stratification of the rates was being implemented. This issue was fixed in both SAS and WinQI so that this truncation only applies in cases where no stratification is being performed. |
| V4.4 | March 2012 | Software | Software/ Documentation | SAS and WinQI v4.4 remain 32-bit applications developed on a Windows XP operating system. Some limited testing has been performed to ensure that these applications will run successfully under a 64-bit, Windows 7 environment. One additional installation requirement related to administrator rights has been included in the software documentation. |
| V4.4 | March 2012 | Software | Software/ Documentation | WinQI v4.3 was missing the PRPED5D code set and codes 7454 and 7455. This issue was fixed in v4.4 of WinQI and affects PDI 06 only. |
| V4.4 | March 2012 | Software | Software/ Documentation | The WinQI v4.3 patient-level report showed incorrect POA exclusions in some cases. This issue was fixed in v4.4 of WinQI. |
| V4.4 | March 2012 | Software | Software/ Documentation | WinQI v4.3 was not properly calculating quarterly rates when requested by the user. This issue was fixed in v4.4 of WinQI. |

AHRQ Quality Indicators<sup>TM</sup>

Pediatric Quality Indicators (PDI), Log of ICD-10-CM/procedure and DRG Coding Updates and Revisions to PDI Documentation and Software

| VERSION/ REVISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| V4.4 | March 2012 | Software | Software/ Documentation | SAS v4.3 did not properly handle stratifications where the user requested a two-way stratification that overlapped with a one-way stratification (e.g., Age-by-Gender at the same time as Age by itself). This issue was in fixed in v4.4 of SAS. |
| V4.4 | March 2012 | Software | Software/ Documentation | Sort routine was (PROC SORT) was introduced to PDSASP3 and PDSASA3 programs before merging all the indicators together to sorting problems in SAS whenever user selects multiple stata (e.g. stratifies by age, gender, and age by gender) |
| V4.4 | March 2012 | Software | Software/ Documentation | WinQI v4.3 did not properly implement a user selection of years later than 2009 during area report generation.  Users were unable to select the year 2010 or 2011 to derive the denominator for area indicators.  This issue, which affected all area-level QI, was fixed in v4.4 of WinQI. |
| V4.4 | March 2012 | Software | Software/ Documentation | The files of shrinkage factors (MSXPDP43.TXT) which were applied to the risk-adjusted were revised using re-calculated signal variance. |
| V4.4 | March 2012 | Software | Software/ Documentation | PDI 09: Modified the order of denominator exclusion/inclusions and numerator flags. |
| V4.4 | March 2012 | Software | Software/ Documentation | PDSASA2.SAS program was revised to include denominator adjustment when the population count for certain combination of strata was zero. |
| V4.4 | March 2012 | Software | Software/ Documentation | Minor SAS versus WinQI coding differences were corrected in the implementation of the technical specifications (e.g., differences in the order in which statements were evaluated) for PDI 01 and PDI 02. |
| V4.4 | March 2012 | Software | Software/ Documentation | PDI 15 (Diabetes Short-term Complications Admission Rate) can be calculated using the number of diabetics in the state as the denominator, stratified by age. |

| VERSION/ REVISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| V4.4 | March 2012 | Software | Software/ Documentation | Changes were made to the SAS and WinQI software to implement a re-estimation of the signal variance in order to correct the fact that the smoothed rates in v4.3 of the software were constant for all providers for four indicators (IQI-11, IQI-14, NQI-01 and PSI-08). |
| V4.3 | April 2011 | Iatrogenic Pneumothorax (PDI 5) Denominator (Exclusion, thoracic procedure) | Coding | Add code: 3227 BRNC THRMPLSTY, ABLT MSCL |
| V4.3 | April 2011 | Iatrogenic Pneumothorax (PDI 5) Denominator (Exclusion, cardiac procedure) | Coding | Add code: 3597 PERC MRTL VLV REPR W IMP 3737 EXC/DEST HRT LES, THRSPC |
| V4.3 | April 2011 | Postoperative Hemorrhage or Hematoma (PDI 8) | Coding | Add to risk category for diagnosis of coagulopathy 28741 POSTTRANSFUSION PURPURA |
| V4.3 | April 2011 | Transfusion Reaction (PDI 13) Numerator (Inclusion, transfusion reaction) | Coding | Add code: 99960 ABO INCOMPAT REACT NOS 99961 ABO INCOMP/HTR NEC 99962 ABO INCOMPAT/ACUTE HTR 99963 ABO INCOMPAT/DELAY HTR 99969 ABO INCOMPAT REACTN NEC 99970 RH INCOMPAT REACTION NOS 99971 RH INCOMP/HTR NEC 99972 RH INCOMPAT/ACUTE HTR 99973 RH INCMPAT/DELAY HTR 99974 RH INCOMPAT REACTION NEC |

| VERSION/ REVISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| V4.3 | April 2011 | AHRQ Procedure Class | Coding | Add to procedure class: Class 1: 1771 NON-CORONARY IFVA Class 2: 0060 INS D-E STNT SUP FEM ART 3897 CV CATH PLCMT W GUIDANCE Class 4: 0120 IMP/REPL BRAIN PULSE GEN 0129 REM BRAIN PULSE GENERATR 3227 BRNC THRMPLSTY ABLT MSCL 3597 PERC MTRL VLV REPR W IMP 3737 EXC/DEST HRT LES THRSPC 3981 IMP CRTD SINUS STMTOTL 3982 IMP/REP CRTD SINUS LEAD 3983 IMP/RED CRTD SINUS GNRTR 3984 REV CRTD SINUS STM LEADS 3985 REV CRTD SINUS PULSE GEN 3986 REM CRTD SINUS STM TOTL 3987 REM CRTD SINUS STM LEAD 3988 REM CRTD SINUS PULSE GEN 3989 OTH CARTD BODY/SINUS OP 8188 RVRS TOTL SHLDR REPLACMT 8494 INS STRN FIX W RGD PLATE 8555 FAT GRAFT TO BREST 8687 FAT GRFT SKIN/SUBQ TISS 8690 EXT FAT FOR GRFT/BANKING |

| VERSION/ REVISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| V4.3 | April 2011 | Major Operating Room Procedure | Coding | Add codes: 0120 IMP/REPL BRAIN PULSE GEN 0129 REM BRAIN PULSE GENERATR 3227 BRNC THRMPLSTY ABLT MSCL 3597 PERC MTRL VLV REPR W IMP 3737 EXC/DEST HRT LES THRSPC 3981 IMP CRTD SINUS STMTOTL 3982 IMP/REP CRTD SINUS LEAD 3983 IMP/REP CRTD SINUS GNRTR 3984 REV CRTD SIMUS STM LEADS 3985 REV CRTD SINUS PULSE GEN 3986 REM CRTF SINUS STM TOTL 3987 REM CRTD SINUS STM LEAD 3988 REM CRTD SINUS PULSE GEN 3989 OTH CARTD BODY/SINUS OP 8188 RVRS TOTL SHLDR REPLACMT 8494 INS STRN FIX W RGD PLATE 8555 FAT GRAFT TO BREAST 8587 FAT GRFT SKIN/SUBQ TISS 8690 EXT FAT FOR GRFT/BANKING |

| VERSION/ REVISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| V4.3 | April 2011 | AHRQ Clinical Classification Software | Coding | Add codes:<br>CCS 58:<br>27501 HEREDIT HEMOCHROMATOSIS<br>27502 HEMOCHROMATOS-RBC TRANS<br>27503 HEMOCHROMATOSIS NEC<br>27509 DISORD IRON METABLSM NEC<br>27803 OBESITY HYPOVENTS SYND<br>V8541 BMI 40.0-44.9, ADULT<br>V8542 BMI 45.0-49.9, ADULT<br>V8543 BMI 50.0-59.9, ADULT<br>V8544 BMI 60-69.9, ADULT<br>V8545 BMI 70 AND OVER, ADULT<br>CCS 62:<br>28749 SEC THROMBOCYTPENIA NEC<br>CCS 83:<br>78033 POST TRAUMATIC SEIZURES<br>CCS 95:<br>78452 FLNCY DSORD COND ELSEWHR<br>79951 ATTN/CONCENTRATE DEFICIT<br>79952 COG COMMUNICATE DEFICIT<br>79953 VISUOSPATIAL DEFICIT<br>79954 PSYCHOMOTOR DEFICIT<br>79955 FRONTAL LOBE DEFICIT<br>79959 COGNITION SIGN/SYMPT NEC<br>CCS 133:<br>78630 HEMOPTYSIS NOS<br>78631 AC IDIO PUL HEMRG INFANT<br>78639 HEMOPTYSIS NEC |

| VERSION/ REVISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| | | | | CCS 213: <br> V1365 HX-CONG MALFORM-HEART <br> CCS 214: <br> V1367 HX-CONG MALFORM-DIGEST <br> CCS 215: <br> 75231 AGENESIS OF UTERUS <br> 75232 HYPOPLASIA OF UTERUS <br> 75233 UNICORNUATE UTERUS <br> 75234 BICORNUATE UTERUS <br> 75235 SEPTATE UTERUS <br> 75236 ARCUATE UTERUS <br> 75239 ANOMALIES OF UTERUS NEC <br> 75243 CERVIAL AGENESIS <br> 75244 CERVICAL DUPLICATION <br> 75245 VAGINAL AGENESIS <br> 75246 TRANSV VAGINAL SEPTUM <br> 75247 LONGITUD VAGINAL SEPTUM <br> V1362 HX-CONG MALFORM-CU <br> CCS 216: <br> V1363 HX-CONG MALFORM-NERVOUS <br> CCS 217: <br> V1364 HX-CONG MALFORM-EYE,FACE <br> V1366 HX-CONG MALFORM-RESP SYS <br> V1368 HX-CONG MALFORM-SKIN,MS <br> CCS 654: <br> 31535 CHLDHD ONSET FLNCY DISOR |
| V4.3 | April 2011 | Surgical MS-DRG | Coding | Add to numerator inclusion for Surgical DRG <br> 14 ALLOGENIC BONE MARROW TRANSPLANT <br> 15 AUTOLOGOUS BONE MARROW TRANSPLANT |
| V4.3 | April 2011 | Software (SAS and WinQI) and Documentation | Software/ Documents | PDI #2: Modified inclusion logic to remove exclusion of pressure ulcer in stage I or II to capture diagnosis of stage III or IV ulcers. |

| VERSION/ REVISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| V4.3 | April 2011 | Software (SAS and WinQI) and Documentation | Software/ Documents | PDI #5: Added denominator exclusions for thoracic procedures (43.5, 43.99, 44.67, 77.81, 77.91) |
| V4.3 | April 2011 | Software (SAS and WinQI) and Documentation | Software/ Documents | PDI #9: Added denominator exclusion for esophageal resection procedure (MDC 4), lung cancer procedures (32.39, 32.49, 32.59), ENT/neck procedures (CCS 33), and degenerative neurological disorders (CCS 653) |
| V4.3 | June 30, 2011 | Software (SAS and WinQI) and Documentation | Software/ Documents | AHRQ Clinical Classification Software: Modified CCS 65 to CCS 654 and CCS 67 to CCS 661. Added codes: 307.0, 307.9, 315.00, 315.01, 315.02, 315.09, 315.1, 315.2, 315.31, 315.32, 315.34, 315.35, 315.39, 315.4, 315.5, 315.8, 315.9, V40.0, V40.1, 648.30, 648.31, 648.32, 648.33, 648.34, 655.50, 655.51, 655.53, 760.72, 760.73, 760.75, 779.5, 965.00, 965.01, 965.02, 965.09, V65.42. Removed codes:305.1, 305.10, 305.11, 305.12, 305.13, V15.82 |
| V4.3 | June 30, 2011 | Guide | Software/ Documents | Revised and updated all sections of the guide document to reflect current state of indicators, software and body of evidence. |
| V4.2 | September 30, 2010 | Pressure Ulcer (PDI 2) | Coding | Add diagnosis codes to stratifiers by hemiplegia, paraplegia, or quadriplegia 768.70 Hypoxic-ischemic encephalopathy, unspecified 768.72 Moderate hypoxic-ischemic encephalopathy 768.73 Severe hypoxic-ischemic encephalopathy |
| V4.2 | September 30, 2010 | Postoperative Respiratory Failure (PDI 9) Denominator (Exclusion, neuromuscular disorders) | Coding | 359.71 Inclusion body myositis IBM 359.79 Other inflammatory and immune myopathies, NEC |

| VERSION/ REVISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| V4.2 | September 30, 2010 | Postoperative Sepsis (PDI 10) Denominator (Exclusion, Infection) | Coding | 670.00 Major puerperal infection NOS-unsp<br>670.02 Major puerperal Infection NOS-del p/p<br>670.04 Major puerperal infection NOS-p/p<br>670.10 Puerperal endometritis-unsp<br>670.12 Puerperal endometritis del w p/p<br>670.14 Puerperal endometritis-postpart<br>670.20 Puerperal sepsis-unsp<br>670.22 Puerperal sepsis-del w p/p<br>670.24 Puerperal sepsis-postpart<br>670.30 Puerperal septic thrombophlebitis-unsp<br>670.32 Puerperal septic thrombophlebitis-del w p/p<br>670.34 Puerperal septic thrombophlebitis-postpart<br>670.80 Major puerperal infection NEC-suspec<br>670.82 Major puerperal infection NEC-dl w p/p<br>670.84 Major puerperal infection NEC-p/p |
| V4.2 | September 30, 2010 | Postoperative Wound Dehiscence (PDI 11) Denominator (Exclusion, high risk group) | Coding | 279.41 Autoimmune lymphoproliferative syndrome ALPS<br>279.49 Autoimmune disease, not elsewhere classified |

| VERSION/ REVISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| V4.2 | September 30, 2010 | Multiple PDI Indicators | Coding | Add procedure codes:<br>0049 Superstat O2 Therapy<br>0058 Ins Intra-ansm Pres Mntr<br>0059 Intravasc Msmnt Cor Art<br>0067 Intravas Msmnt Thorc Art<br>0068 Intravas MsMt Periph Art<br>0069 Intravs Msmt Ves NEC/NOS<br>1751 Implant CCM, total system<br>1752 Implant CCM pulse gentr<br>1761 LITT lesn brain, guidance<br>1762 LITT les hd/nck, guidance<br>1763 LITT lesn liver, guidance<br>1769 LITT lesn, guide oth/NOS<br>1770 Intravenous Infusion of Clofarabine<br>3373 Endo ins/re brnc val, mul<br>3824 Intravas img corves OCT<br>3825 Intravas img non-cor OCT<br>3975 Endo emb hd/nk, bare coil<br>3976 Endo em hed/nk, bioac coil<br>4686 Endo insrt colonic stent<br>4687 Insert colonic stent NEC<br>3850 ABDPERNEAL RES RECTM NOS<br>8570 TOTL RECONSTC Breast NOS |

AHRQ Quality Indicators<sup>TM</sup>

**Pediatric Quality Indicators (PDI), Log of ICD-10-CM/procedure and DRG Coding Updates and Revisions to PDI Documentation and Software**

| VERSION/ REVISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| V4.2 | September 30, 2010 | Multiple PDI Indicators | Coding | Change procedure codes: 3760 Imp Bivn Ext Hrt Ast Sys 4840 Pull-thru Res Rectum NOS Change procedure codes category assignments: 0044 PROC-VESSEL BIFURCATION 0074 HIP REPL SURFMETAL/POLY 0075 HIP REP SURFMETAL/METAL 0076 HIP REP SURFCERMC/CERMC 0077 HIP REPL SURF- CERMC/POLY 0094 HITRA-OP NEUROPHYS MONTR 0110 INTRACRAN PRESSURE MONTR 0116 INTRACRANIAL 02 MONITOR 0117 BRAIN TEMP MONITORING 0126 INS CATHCRANIAL CAVITY 0127 REM CATHCRANIAL CAVITY 1741 OPEN ROBOTIC ASSIST PROC 1742 LAP ROBOTIC ASSIST PROC 1743 PERC ROBOTIC ASSIST PROC 1744 ENDO ROBOTIC ASSIST PROC 1745 THORACO ROBOTIC AST PROC 1749 ROBOTIC AST PROC NEC/NOS 3372 ENDO PULM ARWY FLOW MSMT 3736 EXC LEFT A TRAIL APPENDAG 3768 PERCUTAN HRT ASSIST SYST 3790 INS LEFT ATR APPEND DEV 3823 INTRAVASCLR SPECTROSCOPY 5013 TRANSJUGULAR LIVER BX 7094 INSERT BIOLOGICAL GRAFT 7095 INSERT SYNTH GRAFT/PROST 8472 APP EXT FIX DEVRING SYS 8473 APP HYBRID EXT FIX DEV 9227 RADIOACTIVE ELEM IMPLANT |

| VERSION/ REVISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| V4.2 | September 30, 2010 | Multiple PDI Indicators | Coding | Add new operating procedure codes:<br>1751 Implant CCM, total system<br>1752 Implant CCM pulse  gentr<br>1761 LITT lesn brain, guidance<br>1762 LITT les hd/nck, guidance<br>1763 LITT lesn liver,  guidance<br>1769 LITT lesn, guide oth/NOS<br>3975 Endo emb hd/nk, bare coil<br>3976 Endo em hed/nk, bioac coil<br>4850 ABDPERNEAL RES RECTM NOS<br>8570 TOTL RECONSTC BREAST NOS<br><br>Modify:<br>9227 RADIOACTIVE ELEM IMPLANT<br>3760 IMP BIVN EXT HRT AST SYS<br>4840 PULL-THRU RES RECTUM NOS<br>3768 PERCUTAN HRT ASSIST SYST |

| VERSION/ REVISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| V4.2 | September 30, 2010 | Multiple PDI Indicators | Coding | Remove operating procedure codes: 0044 PROC-VESSEL BIFURCATION 0074 HIP REPL SURFMETAL/POLY 0075 HIP REP SURFMETAL/METAL 0076 HIP REP SURFCERMC/CERMC 0077 HIP REPL SURF- CERMC/POLY 0126 INS CATHCRANIAL CAVITY 0127 REM CATHCRANIAL CAVITY 1741 OPEN ROBOTIC ASSIST PROC 1742 LAP ROBOTIC ASSIST PROC 1743 PERC ROBOTIC ASSIST PROC 1744 ENDO ROBOTIC ASSIST PROC 1745 THORACO ROBOTIC AST PROC 1749 ROBOTIC AST PROC NEC/NOS 3372 ENDO PULM ARWY FLOW MSMT 3736 EXC LEFT A TRAIL APPENDAG 3790 INS LEFT ATR APPEND DEV 3823 INTRAVASCLR SPECTROSCOPY 7094 INSERT BIOLOGICAL GRAFT 7095 INSERT SYNTH GRAFT/PROST 8472 APP EXT FIX DEVRING SYS 8473 APP HYBRID EXT FIX DEV |
| V4.2 | September 30, 2010 | Multiple PDI Indicators | Coding | Add ICD-9-CM codes to the corresponding CCS categories, per Table 2 in Appendix. |
| V4.1 | December 2, 2009 | SAS Software and Documentation | Software/ Documents | PQI #9 – Low Birth Weight and PSI #17 – Birth Trauma Injury to Neonates – now calculated in the PDI SAS module. Technical Specifications for these indicators are distributed with their respective (PQI and PSI) set of documents. |
| V 4.0 | June 30, 2009 | Software and Documentation | Software/ Documents | PDI #2 – Pressure Ulcer (formerly Decubitus Ulcer) – added diagnosis code to denominator exclusion for hemi- and paraplegia (334.1) |

| VERSION/ REVISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| V 4.0 | June 30, 2009 | Software and Documentation | Software/ Documents | NQI #1 and PDI #5 – Iatrogenic Pneumothorax – 1) replaced the DRG denominator exclusion for cardiac surgery with procedure code denominator exclusion for cardiac procedures; 2) added procedure codes to denominator exclusion for thoracic procedures |
| V 4.0 | June 30, 2009 | Software and Documentation | Software/ Documents | PDI #4 – Iatrogenic Pneumothorax in Neonates has been redesignated as NQI #1. It is still calculated by the PDI SAS module. |
| V 4.0 | June 30, 2009 | Software and Documentation | Software/ Documents | PDI #9 – Postoperative respiratory failure – added denominator exclusion for craniofacial anomalies with 1) a procedure code for laryngeal or pharyngeal surgery or 2) a procedure on face and a diagnosis code of craniofacial abnormalities. |
| V 4.0 | June 30, 2009 | Software and Documentation | Software/ Documents | PDI #10 – Postoperative sepsis – removed diagnosis code from numerator inclusion for sepsis for discharges after 2004Q4 (effective October 1, 2004) |
| V 4.0 | June 30, 2009 | Software and Documentation | Software/ Documents | PDI #12 – Central Line-associated Bloodstream Infection – renamed the indicator from "Selected infections due to medical care" |
| V 4.0 | June 30, 2009 | Software and Documentation | Software/ Documents | PDI #16 – Gastroenteritis – added diagnosis code to numerator exclusion for gastrointestinal abnormalities (538 Gastrointestinal mucositis (ulcerative)) |
| V 4.0 | June 30, 2009 | Software and Documentation | Software/ Documents | Multiple – Infection – 1) removed diagnosis codes for non-bacterial infections from denominator exclusion for infection; 2) Add diagnosis code to denominator exclusion for infection (078.3 CAT-SCRATCH DISEASE) |
| V 4.0 | June 30, 2009 | Software and Documentation | Software/ Documents | Multiple – Major Operating Room Procedures – removed selected procedure codes from the denominator inclusion for major operating room procedures |
| V 4.0 | June 30, 2009 | Software and Documentation | Software/ Documents | Medical DRGs – replaced the DRG denominator inclusion for medical discharges with the MS-DRG denominator inclusion for medical discharges for discharges after 2007Q4 (effective October 1, 2007). |

| VERSION/ REVISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| V 4.0 | June 30, 2009 | Software and Documentation | Software/ Documents | Surgical DRGs – replaced the DRG denominator inclusion for surgical discharges with the MS-DRG denominator exclusion for surgical discharges for discharges after 2007Q4 (effective October 1, 2007) |
| V 4.0 | June 30, 2009 | Software and Documentation | Software/ Documents | Adult DRGs – dropped the DRG denominator inclusion for adult DRGs. |
| V 4.0 | June 30, 2009 | Software and Documentation | Software/ Documents | Pediatric Heart Surgery Mortality (PDI #6) – excluded cases with any diagnosis of ASD or VSD with PDA as the only procedure |
| V 4.0 | June 30, 2009 | Software and Documentation | Software/ Documents | Iatrogenic Pneumothorax – Neonates (PDI #4) – renamed PDI #4 to NQI #1 |
| V 4.0 | June 30, 2009 | Software and Documentation | Software/ Documents | Neonatal Mortality (NQI #2) – added the Neonatal Mortality indicator |
| V 4.0 | June 30, 2009 | Software and Documentation | Software/ Documents | Blood Stream Infection – Neonates (NQI #3) – added the Blood Stream Infection – Neonates indicator |
| V4.0 | June 30, 2009 | Software and Documentation | Software/ Documents | Implement UB-04 – The UB-04 (effective October 1, 2007) changes were implemented including new data elements for point-of-origin and present on admission |
| V4.0 | June 30, 2009 | Software and Documentation | Software/ Documents | Update Benchmarking Data to 2007 – used data from the 2007 SID for computation of benchmarks |
| V4.0 | February 25, 2009 | Accidental Puncture or Laceration (PDI 1) Denominator (Inclusion, spinal surgeries) | Coding | Add procedure codes to denominator inclusion for spinal surgeries ($SPINEP)<br><br>Add codes:<br>80.53 Repair of the annulus fibrosus with graft or prosthesis<br>80.54 Other and unspecified repair of the anulus fibrosus |

| VERSION/ REVISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| V4.0 | February 25, 2009 | Pressure Ulcer (PDI 2) Denominator (Exclusion, diagnosis of Stage I or Stage II) | Coding | Add denominator exclusion for diagnosis of Stage I or Stage II ($DECUBVD)<br><br>Add code:<br>707.20 PRESSURE ULCER, STAGE NOS<br>707.21 PRESSURE ULCER, STAGE I<br>707.22 PRESSURE ULCER, STAGE II |
| V4.0 | February 25, 2009 | Iatrogenic Pneumothorax (PDI 4 and 5) Denominator (Exclusion, diaphragmatic surgery repair) | Coding | Add procedure codes to denominator exclusion for diaphragmatic surgery repair ($DIAPHRP)<br><br>Add code:<br>53.71 Laparoscopic repair of diaphragmatic hernia, abdominal approach<br>53.72 Other and open repair of diaphragmatic hernia, abdominal approach<br>53.75 Repair of diaphragmatic hernia, abdominal approach, NOS<br>55.83 Laparoscopic repair of diaphragmatic hernia, with thoracic approach<br>55.84 Other and open repair of diaphragmatic hernia, with thoracic approach |
| V4.0 | February 25, 2009 | Iatrogenic Pneumothorax (PDI 4 and 5) Denominator (Exclusion, pleural effusion) | Coding | Add diagnosis codes to denominator exclusion for pleural effusion ($PLEURAD)<br><br>Add code:<br>511.81 Malignant pleural effusion<br>511.89 Other specified forms of effusion, except tuberculosis |
| V4.0 | February 25, 2009 | Iatrogenic Pneumothorax (PDI 4 and 5) Denominator (Exclusion) | Coding | Replace the DRG denominator exclusion for cardiac surgery ($CARDSDR) with a procedure code denominator exclusion for cardiac procedures ($CARDSIP). See Table 1 in Appendix for cardiac procedure codes.<br><br>Add code:<br>37.36 Excision or destruction of left atrial appendage (LAA)<br>37.55 Removal of internal biventricular heart replacement system<br>37.60 Implantation or insertion of biventricular external heart assist system |

| VERSION/ REVISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| V4.0 | February 25, 2009 | Pediatric Heart Surgery (PDI 6 and 7) Denominator (Inclusion, procedures to repair congenital heart defect) | Coding | Add procedure code to denominator inclusion for procedures to repair congenital heart defect ($PRPED1P)<br><br>Add code:<br>37.36 Excision or destruction of left atrial appendage (LAA) |
| V4.0 | February 25, 2009 | Postoperative Sepsis (PDI 10) Numerator (Inclusion, sepsis) | Coding | Add diagnosis code to numerator inclusion for sepsis ($SEPTIID)<br><br>Modify code:<br>38.11   Methicillin susceptible staphylococcus aureus septicemia<br><br>Add code:<br>38.12   Methicillin resistant Staphylococcus aureus septicemia |
| V4.0 | February 25, 2009 | Postoperative Wound Dehiscence (PDI 11) Denominator (Inclusion, abdominopelvic procedures) | Coding | Add procedure codes to denominator inclusion for abdominopelvic procedures ($ABDOMIP)<br><br>Add codes:<br>17.31 Laparoscopic multiple segmental resection of large intestine<br>17.32 Laparoscopic cecectomy<br>17.33 Laparoscopic right hemicolectomy<br>17.34 Laparoscopic resection of transverse colon<br>17.35 Laparoscopic left hemicolectomy<br>17.36 Laparoscopic sigmoidectomy<br>17.39 Other laparoscopic partial excision of large intestine<br>45.81 Laparoscopic total intra-abdominal colectomy<br>45.82 Open total intra-abdominal colectomy<br>45.83 Other and unspecified total intra-abdominal colectomy<br>48.40 Pull-through resection of rectum, not otherwise specified<br>48.43 Open pull-through resection of rectum<br>48.50 Abdominoperineal resection of the rectum, NOS<br>48.52 Open abdominoperineal resection of the rectum<br>48.59 Other abdominoperineal resection of the rectum<br>53.75 Repair of diaphragmatic hernia, abdominal approach, NOS |

| VERSION/ REVISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| V4.0 | February 25, 2009 | Gastroenteritis (PDI 16) Numerator (Exclusion, gastrointestinal abnormalities) | Coding | Add diagnosis codes to numerator exclusion for gastrointestinal abnormalities ($ACGDISD)<br><br>Add codes:<br>53570 EOSINOPHIL GASTRT WO HEM<br>53571 EOSINOPHILC GASTRT W HEM<br>558.41 Eosinophilic gastroenteritis<br>558.42 Eosinophilic colitis |

| VERSION/ REVISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| V4.0 | February 25, 2009 | Multiple – Immunocompromised Denominator (Exclusion, high risk immuno-compromised) | Coding | Add diagnosis codes to denominator exclusion for high risk immunocompromised ($IMMUNHD)<br><br>Add codes:<br>199.2 Malignant neoplasm associated with transplanted organ<br>238.79 Other lymphatic and hematopoietic tissues<br>238.77 Post-transplant lymphoproliferative disorder<br>279.50 Graft-versus-host disease, unspecified<br>279.51 Acute graft-versus-host disease<br>279.52 Chronic graft-versus-host disease<br>279.53 Acute on chronic graft-versus-host disease<br>V45.11 Renal dialysis status<br><br>Add codes:<br>203.02 MULT MYELOMA IN RELAPSE<br>203.12 PLSM CEL LEUK IN RELAPSE<br>203.82 OTH IMNPRLF NEO-RELAPSE<br>204.02 ACT LYMP LEUK IN RELAPSE<br>204.12 CHR LYMP LEUK IN RELAPSE<br>204.22 SBAC LYM LEUK IN RELAPSE<br>204.82 OTH LYM LEUK IN RELAPSE<br>204.92 LYMP LEUK NOS RELAPSE<br>205.02 ACT MYEL LEUK IN RELAPSE<br>205.12 CHR MYEL LEUK IN RELAPSE<br>205.22 SBAC MYL LEUK IN RELAPSE<br>205.32 MYEL SARCOMA IN RELAPSE<br>205.82 OTH MYEL LEUK IN RELAPSE<br>205.92 MYEL LEUK NOS IN RELAPSE<br>206.02 ACT MONO LEUK IN RELAPSE<br>206.12 CHR MONO LEUK IN RELAPSE<br>206.22 SBAC MONO LEU IN RELAPSE<br>206.82 OTH MONO LEUK IN RELAPSE<br>206.92 MONO LEUK NOS RELAPSE |

| VERSION/ REVISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| | | | | 207.02 AC ERTH/ERYLK IN RELAPSE |
| | | | | 207.12 CHR ERYTHRMIA IN RELAPSE |
| | | | | 207.22 MGKRYCYT LEUK IN RELAPSE |
| | | | | 207.82 OTH SPF LEUK IN RELAPSE |
| | | | | 208.02 AC LEUK UNS CL RELAPSE |
| | | | | 208.12 CH LEU UNS CL IN RELAPSE |
| | | | | 208.22 SBAC LEU UNS CL-RELAPSE |
| | | | | 208.82 OTH LEUK UNS CL-RELAPSE |
| | | | | 208.92 LEUKEMIA NOS IN RELAPSE |

| VERSION/ REVISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| V4.0 | February 25, 2009 | Multiple – Infection Denominator (Exclusion, infection) | Coding | Add diagnosis codes to denominator exclusion for infection ($INFECID)<br><br>Modify codes:<br>038.11 Methicillin susceptible staphylococcus aureus septicemia<br>041.11 Methicillin susceptible staphylococcus aureus<br>482.41 Methicillin susceptible pneumonia due to staphylococcus aureus<br><br>Add codes:<br>038.12 Methicillin resistant Staphylococcus aureus septicemia<br>041.12 Methicillin resistant Staphylococcus aureus (MRSA)<br>482.42 Methicillin resistant pneumonia due to staphylococcus aureus<br>707.20 Pressure ulcer unspecified stage<br>707.22 Pressure ulcer stage II<br>707.23 Pressure ulcer stage III<br>707.24 Pressure ulcer stage IV<br>777.50 Necrotizing enterocolitis in newborn, unspecified<br>777.51 Stage I necrotizing enterocolitis in newborn<br>777.52 Stage II necrotizing enterocolitis in newborn<br>777.53 Stage III necrotizing enterocolitis in newborn<br><br>Delete codes (for discharges after 2008Q4 effective October 1, 2008):<br>707.1   PRESSURE ULCER, SITE NOS<br>707.2   PRESSURE ULCER, ELBOW<br>707.3   PRESSURE ULCER, UPR BACK<br>707.4   PRESSURE ULCER, LOW BACK<br>707.5   PRESSURE ULCER, HIP<br>707.6   PRESSURE ULCER, BUTTOCK<br>707.7   PRESSURE ULCER, ANKLE<br>707.8   PRESSURE ULCER, HEEL<br>707.09 PRESSURE ULCER, SITE NEC |

| VERSION/ REVISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| V4.0 | February 25, 2009 | Pressure Ulcer (PDI 2) Denominator (Exclusion, hemi- and paraplegia) | Indicator Specification Change | Add diagnosis code to denominator exclusion for hemi- and paraplegia ($HEMIPID)<br><br>Add code:<br>334.1 Hereditary spastic paraplegia |
| V4.0 | February 25, 2009 | Iatrogenic Pneumothorax (PDI 4 and 5) Denominator (Exclusion) | Indicator Specification Change | Replace the DRG denominator exclusion for cardiac surgery ($CARDSDR) with procedure code denominator exclusion for cardiac procedures ($CARDSIP).   See Table 1 in Appendix for cardiac procedure codes. |
| V4.0 | February 25, 2009 | Iatrogenic Pneumothorax (PDI 4 and 5) Denominator (Exclusion, thoracic procedures) | Indicator Specification Change | Add procedure codes to denominator exclusion for thoracic procedures ($THORAIP)<br><br>Add codes:<br>5.22   Sympathectomy Cervical<br>5.23   Sympathectomy Lumbar<br>05.29 Other sympathectomy and ganglionectomy<br>7.80   Thymectomy, not otherwise specified<br>7.81   Other partial excision of thymus<br>7.82   Other total excision of thymus<br>7.83   Thoracoscopic partial excision of thymus<br>7.84   Thoracoscopic total excision of thymus<br>32.49 Other lobectomy of lung |

| VERSION/ REVISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| V4.0 | February 25, 2009 | Postoperative Respiratory Failure (PDI 9) Denominator (Exclusion) | Indicator Specification Change | Add denominator exclusion for craniofacial anomalies with 1) a procedure code for laryngeal or pharyngeal surgery ($CRANI1P) *or* 2) a procedure on face ($CRANI2P) *and* a diagnosis code of craniofacial abnormalities ($CRANIID).<br><br>Add codes for pharyngeal surgery ($CRANI1P):<br>25.3 Complete glossectomy<br>25.4 Radical glossectomy<br>27.31 Local excision or destruction of lesion or tissue of bony palate<br>29.0 Pharyngotomy<br>29.33 Pharyngectomy (partial)<br>29.39 Other excision or destruction of lesion or tissue of pharynx<br>29.4 Plastic operation on pharynx<br>29.53 Closure of other fistula of pharynx<br>29.59 Other repair of pharynx<br>29.91 Dilation of pharynx<br>30.09 Other excision or destruction of lesion or tissue of larynx<br>30.21 Epiglottidectomy<br>30.22 Vocal cordectomy<br>30.29 Other partial laryngectomy<br>30.3 Complete laryngectomy<br>30.4 Radical laryngectomy<br>31.3 Other incision of larynx or trachea<br>31.5 Local excision or destruction of lesion or tissue of trachea<br>31.69 Other repair of larynx<br>31.73 Closure of other fistula of trachea<br>31.75 Reconstruction of trachea and construction of artificial larynx<br>31.79 Other repair and plastic operations on trachea<br>31.98 Other operations on larynx<br>31.99 Other operations on trachea |

| VERSION/ REVISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| | | | | Add codes for procedure on face ($CRANI2P): 25.2 Partial glossectomy 25.59 Other repair and plastic operations on tongue 27.32 Wide excision or destruction of lesion or tissue of bony palate 27.62 Correction of cleft palate 27.63 Revision of cleft palate repair 27.69 Other plastic repair of palate 29.31 Cricopharyngeal myotomy 76.65 Segmental osteoplasty [osteotomy] of maxilla 76.66 Total osteoplasty [osteotomy] of maxilla 76.46 Other reconstruction of other facial bone 76.69 Other facial bone repair 76.91 Bone graft to facial bone Add codes for craniofacial abnormalities ($CRANIID). 744.83 Macrostomia 744.84 Microstomia 744.9 Unspecified anomalies of face and neck 748.3 Congenital anomalies of skull and face bones 756.0 Tracheomalacia and congenital tracheal stenosis |
| V4.0 | February 25, 2009 | Postoperative Sepsis (PDI 10) Numerator (Inclusion) | Indicator Specification Change | Remove diagnosis code from numerator inclusion for sepsis ($SEPTIID) for discharges after 2004Q4 (effective October 1, 2004) Drop code: 785.59 Shock without mention of trauma, other |
| V4.0 | February 25, 2009 | Hospital Acquired Vascular Catheter Related Infections (PDI 12) | Indicator Specification Change | Rename the indicator from "Selected infections due to medical care" to "Hospital acquired vascular catheter related infections" |

| VERSION/ REVISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| V4.0 | February 25, 2009 | Gastroenteritis (PDI 16) Numerator (Exclusion, gastrointestinal abnormalities) | Indicator Specification Change | Add diagnosis code to numerator exclusion for gastrointestinal abnormalities ($ACGDISD)<br><br>Add code:<br>538 Gastrointestinal mucositis (ulcerative) |
| V4.0 | February 25, 2009 | Multiple – Infection Denominator (Exclusion, infection) | Indicator Specification Change | Remove diagnosis codes for non-bacterial infections from denominator exclusion for infection ($INFECID)<br><br>Drop codes:<br>376.00 ACUTE INFLAM NOS, ORBIT<br>386.30 LABYRINTHITIS NOS<br>386.31 SEROUS LABYRINTHITIS<br>386.32 CIRCUMSCRI LABYRINTHITIS<br>598.1 URETHR STRICT:INFECT NOS<br>598.2 URETH STRICT:OTH INFECT<br>686.01 PYODERMA GANGRENOSUM<br><br>Add diagnosis code to denominator exclusion for infection ($INFECID)<br><br>Add codes:<br>078.3 CAT-SCRATCH DISEASE |

| VERSION/ REVISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| V4.0 | February 25, 2009 | Multiple – Major Operating Room Procedures Denominator (Inclusion) | Indicator Specification Change | Remove procedure codes from the denominator inclusion for major operating room procedures ($ORPROC)<br><br>Drop codes:<br>38.7 INTERRUPTION VENA CAVA<br>41.0 LYMPH STRUCTURE OP NEC<br>41.1 BONE MARROW TRNSPLNT NOS<br>41.2 AUTO BONE MT W/O PURG<br>41.3 ALO BONE MARROW TRNSPLNT<br>41.4 ALLOGRFT BONE MARROW NOS<br>41.5 AUTO HEM STEM CT W/O PUR<br>41.6 ALLO HEM STEM CT W/O PUR<br>41.7 CORD BLD STEM CELL TRANS<br>41.8 AUTO HEM STEM CT W PURG<br>41.9 ALLO HEM STEM CT W PURG<br>41.10 AUTO BONE MT W PURGING |
| V4.0 | February 25, 2009 | Iatrogenic Pneumothorax – Neonates (PDI 4) | Indicator Specification Change | Rename PDI 4 to NQI 1 |
| V4.0 | February 25, 2009 | Neonatal Mortality (NQI 2) | Indicator Specification Change | Add the Neonatal Mortality indicator |
| V4.0 | February 25, 2009 | Blood Stream Infection – Neonates (NQI 3) | Indicator Specification Change | Add the Blood Stream Infection – Neonates indicator |

| VERSION/ REVISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| V 3.2 | March 10, 2008 | Iatrogenic Pneumothorax (PDI #5) Denominator (Exclusion, Thoracic Surgery) | Coding | Added new codes: 32.20 THORAC EXC LUNG LESION 32.30 THORAC SEG LUNG RESECT 32.39 OTH SEG LUNG RESECT NOS 32.41 THORAC LOBECTOMY LUNG 32.50 THORACOSPC PNEUMONECTOMY 32.59 OTHER PNEUMONECTOMY NOS 33.20 THORACOSCOPC LUNG BIOPSY 34.20 THORACOSCOPIC PLEURAL BX 34.52 THORACOSCOPC DECORT LUNG |
| V 3.2 | March 10, 2008 | Selected Infections due to Medical Care (PDI #12) Numerator (Inclusion) | Coding | Added new code 999.31 INFECT D/T CENT VEN CATH |
| V 3.2 | March 10, 2008 | Multiple PDI Indicators Exclusion (Infection) | Coding | Add new codes 040.41 INFANT BOTULISM and 040.42 WOUND BOTULISM |
| V 3.2 | March 10, 2008 | Multiple PDI Indicators | Coding | Updated DRG to Version 25.0 |
| V 3.2 | March 10, 2008 | Software and Documentation | Software/ Documents | PDI #1 (Accidental puncture or laceration) – Added an exclusion for discharges with an ICD-9-CM procedure code for spine surgery PDI #13 (Transfusion Reaction) – Revised the indicator from a rate to a count PDI #3 (Foreign Body left in During Procedure) – Revised the indicator from a rate to a count and to require the POA flag |
| V 3.1a | March 16, 2007 | SAS Software and Documentation | Software/ Documents | Added program to calculate the pediatric patient safety composite measure. The new files are PDI_COMPOSITE.SAS and MSXPDC31.TXT. |

| VERSION/ REVISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| V 3.1a | March 16, 2007 | Software (PDSASA2) | Software/ Documents | Amended the aggregation algorithm to correctly sum the numerator and denominator counts across stratifiers. |
| V 3.1 | March 12, 2007 | Software (SAS and Windows) and Technical Specifications | Software/ Documents | Revised numerator inclusion criteria for Postoperative Hemorrhage and Hematoma (PDI #8) to include a diagnosis of hemorrhage or hematoma and a procedure for control of hemorrhage or drainage of hematoma. |
| V 3.1 | March 12, 2007 | Covariates. Software (SAS and Windows), | Software/ Documents | Based on recommendations of the Risk Adjustment and Hierarchical Modeling (RAHM) Workgroup, computed covariates using logistic regression model with a hospital random-effect instead of the existing simple logistic model. Because the AHRQ QI use a large sample, the impact on the covariates of using the hierarchical model (and hence the impact on the risk-adjusted rates) is minor. Updated the coefficients used in the calculation of expected and risk-adjusted rates to the reference population, based on the 2002-2004 State Inpatient Data (SID). |
| V 3.1 | March 12, 2007 | Covariates, Software (SAS and Windows), Software Documentation | Software/ Documents | Included an option to incorporate the present on admission indicator into the specifications. In general, cases where the outcome of interest is present on admission will be excluded from the denominator, as these cases are no longer at risk of having the outcome of interest occur during the hospitalization. The release also includes alternative parameter files of risk-adjustment covariates and population rates using 2002-2004 SID data from California and New York. |
| V 3.1 | March 12, 2007 | Software (SAS and Windows) | Software/ Documents | Age-, race-, gender- and county-specific population estimates used for AHRQ QI area rates were updated to use revised post-censal estimates for years 2001 through 2005 and projections for the years 2006 and 2007. Added capability to apply weight value to each discharge. The syntax will compute risk-adjusted rates and observed-to-expected ratios for the pre-defined set of stratification variables (e.g., age, gender, payer, race). When stratifications other than hospital or area are selected, the RPPDxx variables and their confidence intervals are observed/expected ratios to avoid confounding with risk adjustment variables. |

| VERSION/ REVISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| V 3.0b | September 29, 2006 | Windows | Software/ Documents | Implemented the pediatric risk adjustment. |
| V 3.0b | September 29, 2006 | SAS Software | Software/ Documents | Changed the PAGECAT stratification data element to correctly assign non-integer AGE values.<br>Changed PHS_RACHS1.TXT syntax to correctly assign the risk category when AGE > 0 and AGEDAY is missing. In general, these cases are now assigned to a lower risk category (impacts about 3% of cases). |
| V 3.0b | September 29, 2006 | Technical Specifications and Software | Software/ Documents | PedQI #1, #3, #6, #10-12. Changed the exclusion from newborns less than 500g to neonates less than 500g. |
| V 3.0b | September 29, 2006 | Measures | Software/ Documents | Revised the text to clarify clinical panel recommendations of indicators for inclusion in Pediatric module and those deferred for further development.<br>Added description of Pediatric Heart Surgery Volume. |
| V 3.0a | May 1, 2006 | SAS | Software/ Documents | Implemented the pediatric risk adjustment. |
| V 3.0a | May 1, 2006 | SAS Software | Software/ Documents | PDSAS1.SAS – Corrected the principal diagnosis exclusion for PedQI #8.<br>PDSASA2.SAS – Corrected the denominator calculation for PedQI #17 |
| V 3.0a | May 1, 2006 | Technical Specifications | Software/ Documents | PedQI #2 – Added exclusion for cases with an ICD-9-CM procedure code of debridement or pedicle graft as the only major operating room procedures (surgical cases only)<br>PedQI #4/#5 – Added exclusion for cases with ICD-9-CM procedure code of diaphragmatic surgery repair<br>PedQIs #16 and #18– Modified exclusion to cases with age less than or equal to 90 days (or neonates if age in days is missing)<br>Deleted ICD-9-CM procedure code 41.0 from the list of major operating room procedure codes<br>Intermediate Risk Immuno-compromised state – Clarified that codes for hepatic failure must be accompanied by codes for cirrhosis. |

| VERSION/ REVISION NUMBER | DATE | COMPONENT | NATURE OF CHANGE | CHANGES |
|---|---|---|---|---|
| V 3.0a | May 1, 2006 | Technical Specifications and Software | Software/ Documents | Corrected ICD-9-CM diagnosis codes 590.00 and 590.01 in the numerator exclusion for PedQI #18.<br>Dropped ICD-9-CM diagnosis codes 585.1, 585.2, 585.3, 585.4 and 585.9 from the high risk immunocompromised state specification.<br>Added ICD-9-CM diagnosis codes 276.50, 276.51 and 276.52 to the numerator specification for PedQI #16.<br>Refined the definition of neonate by dropping the DRG and MDC inclusion criteria.<br>Refined the newborn definition by requiring that age in days be equal to zero (or missing if there is a liveborn diagnosis code). |
| V 3.0 | February 20, 2006 | Technical Specifications and Software | Software/ Documents | Dropped ICD-9-CM diagnosis code 5185 from numerator specification for PedQI #9.<br>Dropped exclusion of all newborns and neonates transferring from another institution, added exclusion of neonates for PedQI #10. |

# Appendices

# Appendix A - Cardiac Procedure Codes as of February 2009

| | | | | |
|------|--------------------------|---|------|--------------------------|
| 3510 | OPEN VALVULOPLASTY NOS | | 3613 | AORTOCOR BYPAS-3 COR ART |
| 3511 | OPN AORTIC VALVULOPLASTY | | 3614 | AORTCOR BYPAS-4+ COR ART |
| 3512 | OPN MITRAL VALVULOPLASTY | | 3615 | 1 INT MAM-COR ART BYPASS |
| 3513 | OPN PULMON VALVULOPLASTY | | 3616 | 2 INT MAM-COR ART BYPASS |
| 3514 | OPN TRICUS VALVULOPLASTY | | 3617 | ABD-CORON ARTERY BYPASS |
| 3520 | OPN/OTH REP HRT VLV NOS | | 3619 | HRT REVAS BYPS ANAS NEC |
| 3521 | OPN/OTH REP AORT VLV-TIS | | 362 | ARTERIAL IMPLANT REVASC |
| 3522 | OPN/OTH REP AORTIC VALVE | | 3631 | OPEN CHEST TRANS REVASC |
| 3523 | OPN/OTH REP MTRL VLV-TIS | | 3632 | OTH TRANSMYO REVASCULAR |
| 3524 | OPN/OTH REP MITRAL VALVE | | 3639 | OTH HEART REVASCULAR |
| 3525 | OPN/OTH REP PULM VLV-TIS | | 3691 | CORON VESS ANEURYSM REP |
| 3526 | OPN/OTH REPL PUL VALVE | | 3699 | HEART VESSEL OP NEC |
| 3527 | OPN/OTH REP TCSPD VLV-TS | | 370 | PERICARDIOCENTESIS |
| 3528 | OPN/OTH REPL TCSPD VALVE | | 3710 | INCISION OF HEART NOS |
| 3531 | PAPILLARY MUSCLE OPS | | 3711 | CARDIOTOMY |
| 3532 | CHORDAE TENDINEAE OPS | | 3712 | PERICARDIOTOMY |
| 3533 | ANNULOPLASTY | | 3731 | PERICARDIECTOMY |
| 3534 | INFUNDIBULECTOMY | | 3732 | HEART ANEURYSM EXCISION |
| 3535 | TRABECUL CARNEAE CORD OP | | 3733 | EXC/DEST HRT LESION OPEN |
| 3539 | TISS ADJ TO VALV OPS NEC | | 3735 | PARTIAL VENTRICULECTOMY |
| 3550 | PROSTH REP HRT SEPTA NOS | | 3741 | IMPL CARDIAC SUPPORT DEV |
| 3551 | PROS REP ATRIAL DEF-OPN | | 3749 | HEART/PERICARD REPR NEC |
| 3553 | PROS REP VENTRIC DEF-OPN | | 3751 | HEART TRANSPLANTATION |
| 3554 | PROS REP ENDOCAR CUSHION | | 3752 | IMP TOT INT BI HT RP SYS |
| 3560 | GRFT REPAIR HRT SEPT NOS | | 3753 | REPL/REP THR UNT TOT HRT |
| 3561 | GRAFT REPAIR ATRIAL DEF | | 3754 | REPL/REP OTH TOT HRT SYS |
| 3562 | GRAFT REPAIR VENTRIC DEF | | 3761 | PULSATION BALLOON IMPLAN |
| 3563 | GRFT REP ENDOCAR CUSHION | | 3762 | INSRT NON-IMPL CIRC DEV |
| 3570 | HEART SEPTA REPAIR NOS | | 3763 | REPAIR HEART ASSIST SYS |
| 3571 | ATRIA SEPTA DEF REP NEC | | 3764 | REMVE EXT HRT ASSIST SYS |
| 3572 | VENTR SEPTA DEF REP NEC | | 3765 | IMP VENT EXT HRT AST SYS |
| 3573 | ENDOCAR CUSHION REP NEC | | 3766 | IMPLANTABLE HRT ASSIST |
| 3581 | TOT REPAIR TETRAL FALLOT | | 3767 | IMP CARDIOMYOSTIMUL SYS |
| 3582 | TOTAL REPAIR OF TAPVC | | 3791 | OPN CHEST CARDIAC MASSAG |
| 3583 | TOT REP TRUNCUS ARTERIOS | | 3804 | INCISION OF AORTA |
| 3584 | TOT COR TRANSPOS GRT VES | | 3805 | THORACIC VESSEL INC NEC |
| 3591 | INTERAT VEN RETRN TRANSP | | 3844 | RESECT ABDM AORTA W REPL |
| 3592 | CONDUIT RT VENT-PUL ART | | 3845 | RESECT THORAC VES W REPL |
| 3593 | CONDUIT LEFT VENTR-AORTA | | 3864 | EXCISION OF AORTA |
| 3594 | CONDUIT ARTIUM-PULM ART | | 3865 | THORACIC VESSEL EXCISION |
| 3595 | HEART REPAIR REVISION | | 3884 | OCCLUDE AORTA NEC |
| 3598 | OTHER HEART SEPTA OPS | | 3885 | OCCLUDE THORACIC VES NEC |
| 3599 | OTHER HEART VALVE OPS | | 390 | SYSTEMIC-PULM ART SHUNT |
| 3603 | OPEN CORONRY ANGIOPLASTY | | 3921 | CAVAL-PULMON ART ANASTOM |
| 3610 | AORTOCORONARY BYPASS NOS | | 3922 | AORTA-SUBCLV-CAROT BYPAS |
| 3611 | AORTOCOR BYPAS-1 COR ART | | 3923 | INTRATHORACIC SHUNT NEC |
| 3612 | AORTOCOR BYPAS-2 COR ART | | | |

# Appendix B - ICD-9-CM codes for corresponding CCS categories as of September 2010

| | | | | |
|---|---|---|---|---|
| 0700 | HEPATITIS A WITH COMA | | 20048 | MANTLE CELL LYMPH MULTIP |
| 0701 | HEPATITIS A W/O COMA | | 20050 | PRIMARY CNS LYMPH XTRNDL |
| 0702 | HEPATITIS B WITH COMA* | | 20051 | PRIMARY CNS LYMPH HEAD |
| 07020 | HPT B ACTE COMA WO DLTA | | 20052 | PRIMARY CNS LYMPH THORAX |
| 07021 | HPT B ACTE COMA W DLTA | | 20053 | PRIMARY CNS LYMPH ABDOM |
| 07022 | HPT B CHRN COMA WO DLTA | | 20054 | PRIMARY CNS LYMPH AXILLA |
| 07023 | HPT B CHRN COMA W DLTA | | 20055 | PRIMARY CNS LYM INGUIN |
| 0703 | HEPATITIS B W/O COMA* | | 20056 | PRIMARY CNS LYMPH PELVIC |
| 07030 | HPT B ACTE WO CM WO DLTA | | 20057 | PRIMARY CNS LYMPH SPLEEN |
| 07031 | HPT B ACTE WO CM W DLTA | | 20058 | PRIMARY CNS LYMPH MULTIP |
| 07032 | HPT B CHRN WO CM WO DLTA | | 20060 | ANAPLASTIC LYMPH XTRNDL |
| 07033 | HPT B CHRN WO CM W DLTA | | 20061 | ANAPLASTIC LYMPH HEAD |
| 0704 | VIRAL HEPAT NEC W COMA* | | 20061 | ANAPLASTIC LYMPH HEAD |
| 07041 | HPT C ACUTE W HEPAT COMA | | 20062 | ANAPLASTIC LYMPH THORAX |
| 07042 | HPT DLT WO B W HPT COMA | | 20062 | ANAPLASTIC LYMPH THORAX |
| 07043 | HPT E W HEPAT COMA | | 20063 | ANAPLASTIC LYMPH ABDOM |
| 07044 | CHRNC HPT C W HEPAT COMA | | 20063 | ANAPLASTIC LYMPH ABDOM |
| 07049 | OTH VRL HEPAT W HPT COMA | | 20064 | ANAPLASTIC LYMPH AXILLA |
| 0705 | VIRAL HEPAT NEC W/O COMA* | | 20064 | ANAPLASTIC LYMPH AXILLA |
| 07051 | HPT C ACUTE WO HPAT COMA | | 20065 | ANAPLASTIC LYMPH INGUIN |
| 07052 | HPT DLT WO B WO HPT COMA | | 20065 | ANAPLASTIC LYMPH INGUIN |
| 07053 | HPT E WO HEPAT COMA | | 20066 | ANAPLASTIC LYMPH PELVIC |
| 07054 | CHRNC HPT C WO HPAT COMA | | 20066 | ANAPLASTIC LYMPH PELVIC |
| 07059 | OTH VRL HPAT WO HPT COMA | | 20067 | ANAPLASTIC LYMPH SPLEEN |
| 0706 | VIRAL HEPAT NOS W COMA | | 20067 | ANAPLASTIC LYMPH SPLEEN |
| 07070 | HPT C W/O HEPAT COMA NOS | | 20068 | ANAPLASTIC LYMPH MULTIP |
| 07071 | HPT C W HEPATIC COMA NOS | | 20068 | ANAPLASTIC LYMPH MULTIP |
| 0709 | VIRAL HEPAT NOS W/O COMA | | 20070 | LARGE CELL LYMPH XTRNDL |
| 20030 | MARGNL ZONE LYM XTRNDL | | 20070 | LARGE CELL LYMPH XTRNDL |
| 20030 | MARGNL ZONE LYM XTRNDL | | 20071 | LARGE CELL LYMPHOMA HEAD |
| 20031 | MARGIN ZONE LYM HEAD | | 20071 | LARGE CELL LYMPHOMA HEAD |
| 20031 | MARGIN ZONE LYM HEAD | | 20072 | LARGE CELL LYMPH THORAX |
| 20032 | MARGIN ZONE LYM THORAX | | 20072 | LARGE CELL LYMPH THORAX |
| 20032 | MARGIN ZONE LYM THORAX | | 20073 | LARGE CELL LYMPH ABDOM |
| 20033 | MARGIN ZONE LYM ABDOM | | 20073 | LARGE CELL LYMPH ABDOM |
| 20033 | MARGIN ZONE LYM ABDOM | | 20074 | LARGE CELL LYMPH AXILLA |
| 20034 | MARGIN ZONE LYM AXILLA | | 20074 | LARGE CELL LYMPH AXILLA |
| 20034 | MARGIN ZONE LYM AXILLA | | 20075 | LARGE CELL LYMPH INGUIN |
| 20035 | MARGIN ZONE LYM INGUIN | | 20075 | LARGE CELL LYMPH INGUIN |
| 20035 | MARGIN ZONE LYM INGUIN | | 20076 | LARGE CELL LYMPH PELVIC |
| 20036 | MARGIN ZONE LYM PELVIC | | 20077 | LARGE CELL LYMPH SPLEEN |
| 20037 | MARGIN ZONE LYMPH SPLEEN | | 20078 | LARGE CELL LYMPH MULTIP |
| 20038 | MARGIN ZONE LYMPH MULTIP | | 20270 | PERIPH T CELL LYM XTRNDL |
| 20040 | MANTLE CELL LYM XTRRNDL | | 20271 | PERIPH T CELL LYMPH HEAD |
| 20041 | MANTLE CELL LYMPH HEAD | | 20272 | PERIPH T CELL LYM THORAX |
| 20042 | MANTLE CELL LYMPH THORAX | | 20273 | PERIPH T CELL LYM ABDOM |
| 20043 | MANTLE CELL LYMPH ABDOM | | 20274 | PERIPH T CELL LYM AXILLA |
| 20044 | MANTLE CELL LYMPH AXILLA | | 20275 | PERIPH T CELL LYM INGUIN |
| 20045 | MANTLE CELL LYMPH INGUIN | | 20276 | PERIPH T CELL LYM PELVIC |
| 20046 | MANTLE CELL LYMPH PELVIC | | 20277 | PERIPH T CELL LYM SPLEEN |
| 20047 | MANTLE CELL LYMPH SPLEEN | | 20278 | PERIPH T CELL LYM MULTIP |

| | | | |
|---|---|---|---|
| 20312 | PLSM CEL LEUK IN RELAPSE | 32730 | CIRCADIAN RHYM SLEEP NOS |
| 20402 | ACT LYMP LEUK IN RELAPSE | 32731 | CIRCADIAN RHY-DELAY SLP |
| 20412 | CHR LYMP LEUK IN RELAPSE | 32732 | CIRCADIAN RHY-ADVC SLEEP |
| 20422 | SBAC LYM LEUK IN RELAPSE | 32733 | CIRCADIAN RHYM-IRREG SLP |
| 20482 | OTH LYM LEUK IN RELAPSE | 32734 | CIRCADIAN RHYM-FREE RUN |
| 20482 | OTH LYM LEUK IN RELAPSE | 32735 | CIRCADIAN RHYTHM-JETLAG |
| 20492 | LYMP LEUK NOS RELAPSE | 32736 | CIRCADIAN RHY-SHIFT WORK |
| 20502 | ACT MYEL LEUK IN RELAPSE | 32737 | CIRCADIAN RHYM OTH DIS |
| 20512 | CHR MYEL LEUK IN RELAPSE | 32739 | CIRCADIAN RHYM SLEEP NEC |
| 20522 | SBAC MYL LEUK IN RELAPSE | 32753 | SLEEP RELATED BRUXISM |
| 20532 | MYEL SARCOMA IN RELAPSE | 3315 | NORML PRESSURE HYDROCEPH |
| 20582 | OTH MYEL LEUK IN RELAPSE | 33183 | MILD COGNITIVE IMPAIREMT |
| 20592 | MYEL LEUK NOS IN RELAPSE | 33700 | IDIO PERPH AUTO NEUR NOS |
| 20602 | ACT MONO LEUK IN RELAPSE | 33701 | CAROTID SINUS SYNDROME |
| 20612 | CHR MONO LEUK IN RELAPSE | 33709 | IDIO PERPH AUTO NEUR NEC |
| 20622 | SBAC MONO LEU IN RELAPSE | 34881 | TEMPORAL SCLEROSIS |
| 20682 | OTH MONO LEUK IN RELAPSE | 34889 | BRAIN CONDITIONS NEC |
| 20692 | MONO LEUK NOS RELAPSE | 34939 | DURAL TEAR NEC |
| 20702 | AC ERTH/ERYLK IN RELAPSE | 35921 | MYOTONIC MUSCLR DYSTRPHY |
| 20712 | CHR ERYTHRMIA IN RELAPSE | 35922 | MYOTONIA CONGENITA |
| 20722 | MGKRYCYT LEUK IN RELAPSE | 35923 | MYOTONIC CHONDRODYSTRPHY |
| 20782 | OTH SPF LEUK IN RELAPSE | 35924 | DRUG INDUCED MYOTONIA |
| 20802 | AC LEUK UNS CL RELAPSE | 35929 | MYOTONIC DISORDER NEC |
| 20812 | CH LEU UNS CL IN RELAPSE | 35971 | INCLUSION BODY MYOSITIS |
| 20822 | SBAC LEU UNS CL-RELAPSE | 35979 | INFLM/IMMUNE MYOPATH NEC |
| 20882 | OTH LEUK UNS CL-RELAPSE | 4041 | BEN HYPERT HRT/RENAL DIS* |
| 20892 | LEUKEMIA NOS IN RELAPSE | 41512 | SEPTIC PULMONARY EMBOLSM |
| 20922 | MALIG CARCINOID THYMUS | 4162 | CHR PULMONARY EMBOLISM |
| 20924 | MALIG CARCINOID KIDNEY | 42682 | LONG QT SYNDROME |
| 20924 | MALIG CARCINOID KIDNEY | 51181 | MALIGNANT PLEURAL EFFUSN |
| 20925 | MAL CARCNOID FOREGUT NOS | 53013 | EOSINOPHILIC ESOPHAGITIS |
| 20926 | MAL CARCINOID MIDGUT NOS | 57142 | AUTOIMMUNE HEPATITIS |
| 20927 | MAL CARCNOID HINDGUT NOS | 72990 | SOFT TISSUE DISORD NOS |
| 20971 | SEC NEUROEND TU DIST LYM | 72991 | POST-TRAUMATIC SEROMA |
| 20972 | SEC NEUROEND TUMOR-LIVER | 72992 | NONTRAUMA HEMA SOFT TISS |
| 20973 | SEC NEUROENDO TUMOR-BONE | 72999 | SOFT TISSUE DISORDER NEC |
| 20974 | SEC NEUROENDO TU-PERITON | 75672 | OMPHALOCELE |
| 25541 | GLUCOCORTICOID DEFICIENT | 75673 | GASTROSCHISIS |
| 25542 | MINERALCORTICOID DEFCNT | 76061 | AMNIOCENTESIS AFFECT NB |
| 25801 | MULT ENDO NEOPLAS TYPE I | 76062 | IN UTERO PROC NEC AFF NB |
| 25950 | ANDROGEN INSENSITVTY NOS | 76063 | MAT SURG DUR PREG AFF NB |
| 25951 | ANDROGEN INSENSITVTY SYN | 76064 | PREV MATERN SURG AFF NB |
| 25952 | PART ANDROGEN INSNSITVTY | 77750 | NEC ENTEROCOLTIS NB NOS |
| 2755 | HUNGRY BONE SYNDROME | 77751 | STG I NEC ENTEROCOL NB |
| 27941 | AUTOIMMUN LYMPHPROF SYND | 77752 | STG II NEC ENTEROCOL NB |
| 27949 | AUTOIMMUNE DISEASE NEC | 77753 | STG III NEC ENTEROCOL NB |
| 2865 | INTR CIRCUL ANTICOAG DIS# | 77931 | NB FEEDING PROBLEMS |
| 2866 | DEFIBRINATION SYNDROME | 77932 | NB BILIOUS VOMITING |
| 2867 | ACQ COAGUL FACTOR DEFIC | 77933 | NB OTHER VOMITING |
| 2874 | SECOND THROMBOCYTOPENIA# | 77934 | NB FAILURE TO THRIVE |
| 28866 | BANDEMIA | 78072 | FUNCTIONAL QUADRIPLEGIA |
| 28982 | SEC HYPERCOAGULABLE ST | 782 | SKIN/OTH INTEGUMENT SYMP* |
| 28984 | HEPARIN-INDU THROMBOCYTO | 78451 | DYSARTHRIA |
| 32702 | INSOMNIA DT MENTAL DISOR | 78459 | SPEECH DISTURBANCE NEC |
| 32715 | HYPERSOM DT MENTAL DISOR | 78951 | MALIGNANT ASCITES |

| | | | |
|---|---|---|---|
| 78959 | ASCITES NEC | V1053 | HX MALIG RENAL PELVIS |
| 7897 | COLIC | V1053 | HX MALIG RENAL PELVIS |
| 79510 | ABN GLAND PAP SMR VAGINA | V1090 | HX MALIG NEOPLASM NOS |
| 79511 | PAP SMEAR VAG W ASC-US | V1091 | HX MALIG NEUROENDO TUMOR |
| 79512 | PAP SMEAR VAGINA W ASC-H | V1359 | HX MUSCULOSKLETL DIS NEC |
| 79513 | PAP SMEAR VAGINA W LGSIL | V4511 | RENAL DIALYSIS STATUS |
| 79514 | PAP SMEAR VAGINA W HGSIL | V4512 | NONCMPLNT W RENAL DIALYS |

# Appendix C – Miscellaneous Hemorrhage or Hematoma-related Procedure Codes as of December 2012

| | | | |
|---|---|---|---|
| 0121 | CRANIAL SINUS I & D | 2109 | EPISTAXIS CONTROL NEC |
| 0124 | OTHER CRANIOTOMY | 211 | INCISION OF NOSE |
| 0131 | INCISE CEREBRAL MENINGES | 2121 | RHINOSCOPY |
| 0139 | OTHER BRAIN INCISION | 2219 | NASAL SINUS DX PROC NEC |
| 0213 | MENINGE VESSEL LIGATION | 2239 | EXT MAXILLARY ANTROT NEC |
| 0239 | VENT SHUNT EXTRACRAN NEC | 2241 | FRONTAL SINUSOTOMY |
| 0241 | IRRIGATE/EXPL VENT SHUNT | 2251 | ETHMOIDOTOMY |
| 0309 | SPINAL CANAL EXPLOR NEC | 2252 | SPHENOIDOTOMY |
| 0401 | EXCISION ACOUSTC NEUROMA | 260 | INCIS SALIVARY GLND/DUCT |
| 0404 | PERIPH NERVE INCIS NEC | 270 | DRAIN FACE & MOUTH FLOOR |
| 0443 | CARPAL TUNNEL RELEASE | 280 | PERITONSILLAR I & D |
| 0444 | TARSAL TUNNEL RELEASE | 2911 | PHARYNGOSCOPY |
| 0602 | REOPEN THYROID FIELD WND | 313 | INCIS LARYNX TRACHEA NEC |
| 0609 | INCIS THYROID FIELD NEC | 3141 | TRACHEOSCOPY THRU STOMA |
| 0692 | THYROID VESSEL LIGATION | 3142 | LARYGNOSCOPY/TRACHEOSCOP |
| 0700 | ADRENAL EXPLORATION NOS | 330 | INCISION OF BRONCHUS |
| 0701 | UNILAT ADRENAL EXPLORAT | 331 | INCISION OF LUNG |
| 0702 | BILAT ADRENAL EXPLORAT | 3322 | FIBER-OPTIC BRONCHOSCOPY |
| 0741 | ADRENAL INCISION | 3323 | OTHER BRONCHOSCOPY |
| 0743 | ADRENAL VESSEL LIGATION | 3324 | CLOSED BRONCHIAL BIOPSY |
| 0751 | PINEAL FIELD EXPLORATION | 3402 | EXPLORATORY THORACOTOMY |
| 0752 | PINEAL GLAND INCISION | 3403 | REOPEN THORACOTOMY SITE |
| 0771 | PITUITARY FOSSA EXPLORAT | 3409 | OTHER PLEURAL INCISION |
| 0772 | PITUITARY GLAND INCISION | 341 | INCISION OF MEDIASTINUM |
| 0791 | THYMUS FIELD EXPLORATION | 3421 | TRANSPLEURA THORACOSCOPY |
| 0792 | OTHER INCISION OF THYMUS | 3422 | MEDIASTINOSCOPY |
| 0795 | THORAC INCISION THYMUS | 3582 | TOTAL REPAIR OF TAPVC |
| 0809 | OTHER EYELID INCISION | 3639 | OTH HEART REVASCULAR |
| 090 | LACRIMAL GLAND INCISION | 3699 | HEART VESSEL OP NEC |
| 0953 | LACRIMAL SAC INCISION | 370 | PERICARDIOCENTESIS |
| 1244 | EXCISE CILIARY BODY LES | 3711 | CARDIOTOMY |
| 1289 | SCLERAL OPERATION NEC | 3799 | OTHER HEART/PERICARD OPS |
| 149 | OTHER POST SEGMENT OPS | 3800 | INCISION OF VESSEL NOS |
| 1609 | ORBITOTOMY NEC | 3801 | INTRACRAN VESSEL INCIS |
| 1802 | EXT AUDITORY CANAL INCIS | 3802 | HEAD/NECK VES INCIS NEC |
| 1809 | EXTERNAL EAR INCIS NEC | 3803 | UPPER LIMB VESSEL INCIS |
| 1811 | OTOSCOPY | 3804 | INCISION OF AORTA |
| 2001 | MYRINGOTOMY W INTUBATION | 3805 | THORACIC VESSEL INC NEC |
| 2009 | MYRINGOTOMY NEC | 3806 | ABDOMEN ARTERY INCISION |
| 2021 | MASTOID INCISION | 3807 | ABDOMINAL VEIN INCISION |
| 2022 | PETRUS PYRAM AIR CEL INC | 3808 | LOWER LIMB ARTERY INCIS |
| 2023 | MIDDLE EAR INCISION | 3809 | LOWER LIMB VEIN INCISION |
| 2079 | INC/EXC/DESTR IN EAR NEC | 3850 | VARICOSE V LIG-STRIP NOS |
| 2100 | CONTROL OF EPISTAXIS NOS | 3851 | INTCRAN VAR V LIG-STRIP |
| 2101 | ANT NASAL PACK FOR EPIST | 3852 | HEAD/NECK VAR V LIG-STR |
| 2102 | POST NASAL PAC FOR EPIST | 3853 | ARM VARICOSE V LIG-STRIP |
| 2103 | CAUTERY TO STOP EPISTAX | 3855 | THORAC VAR V LIG-STRIP |
| 2104 | ETHMOID ART LIGAT-EPIST | 3857 | ABD VARICOS V LIGA-STRIP |
| 2105 | MAX ART LIG FOR EPISTAX | 3859 | LEG VARICOS V LIGA-STRIP |
| 2106 | EXT CAROT ART LIG-EPIST | 387 | INTERRUPTION VENA CAVA |
| 2107 | NASAL SEPT GRFT-EPISTAX | 3930 | SUTURE OF VESSEL NOS |

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|---|---|---|---|---|
| 3931 | SUTURE OF ARTERY | | 5184 | ENDOSC DILATION AMPULLA |
| 3932 | SUTURE OF VEIN | | 5188 | ENDOSC REMOVE BILE STONE |
| 3952 | ANEURYSM REPAIR NEC | | 5196 | PERC EXTRAC COM DUC CALC |
| 3953 | ARTERIOVEN FISTULA REP | | 5198 | OTH PERC PROC BIL TRCT |
| 3972 | ENDOVASC EMBOL HD/NK VES | | 5209 | PANCREATOTOMY NEC |
| 3979 | OTH ENDO PROC OTH VESSEL | | 5213 | ENDOSC RETRO PANCREATOG |
| 398 | CARTD BODY/SINUS/VASC OP# | | 5411 | EXPLORATORY LAPAROTOMY |
| 400 | INCIS LYMPHATIC STRUCTUR | | 5419 | LAPAROTOMY NEC |
| 412 | SPLENOTOMY | | 5421 | LAPAROSCOPY |
| 4209 | ESOPHAGEAL INCISION NEC | | 5495 | PERITONEAL INCISION |
| 4221 | ESOPHAGOSCOPY BY INCIS | | 5501 | NEPHROTOMY |
| 4222 | ESOPHAGOSCOPY THRU STOMA | | 5511 | PYELOTOMY |
| 4223 | ESOPHAGOSCOPY NEC | | 5521 | NEPHROSCOPY |
| 4233 | ENDOSC DESTRUC ESOPH LES | | 5522 | PYELOSCOPY |
| 4239 | DESTRUCT ESOPHAG LES NEC | | 562 | URETEROTOMY |
| 4291 | LIGATION ESOPH VARIX | | 5631 | URETEROSCOPY |
| 430 | GASTROTOMY | | 5719 | CYSTOTOMY NEC |
| 4341 | ENDOSC DESTR STOMACH LES | | 5731 | CYSTOSCOPY THRU STOMA |
| 4411 | TRANSABDOMIN GASTROSCOPY | | 5732 | CYSTOSCOPY NEC |
| 4412 | GASTROSCOPY THRU STOMA | | 580 | URETHROTOMY |
| 4413 | GASTROSCOPY NEC | | 5822 | URETHROSCOPY NEC |
| 4440 | SUTURE PEPTIC ULCER NOS | | 5909 | PERIREN/URETER INCIS NEC |
| 4441 | SUT GASTRIC ULCER SITE | | 600 | INCISION OF PROSTATE |
| 4442 | SUTURE DUODEN ULCER SITE | | 6081 | PERIPROSTATIC INCISION |
| 4443 | ENDOSC CONTROL GAST HEM | | 620 | INCISION OF TESTES |
| 4444 | TRANSCATH EMBO GAST HEM | | 631 | EXC SPERMATIC VARICOCELE |
| 4449 | OTHER CONTROL GAST HEM | | 636 | VASOTOMY |
| 4491 | LIGATE GASTRIC VARICES | | 6372 | SPERMATIC CORD LIGATION |
| 4500 | INTESTINAL INCISION NOS | | 6392 | EPIDIDYMOTOMY |
| 4501 | DUODENAL INCISION | | 6393 | SPERMATIC CORD INCISION |
| 4502 | SMALL BOWEL INCISION NEC | | 6492 | INCISION OF PENIS |
| 4503 | LARGE BOWEL INCISION | | 6501 | LAPAROSCOPIC OOPHOROTOMY |
| 4511 | TRANSAB SM BOWEL ENDOSC | | 6509 | OTHER OOPHOROTOMY |
| 4512 | ENDOSC SM BOWEL THRU ST | | 6601 | SALPINGOTOMY |
| 4513 | SM BOWEL ENDOSCOPY NEC | | 680 | HYSTEROTOMY |
| 4516 | EGD WITH CLOSED BIOPSY | | 6811 | DIGITAL EXAM OF UTERUS |
| 4521 | TRANSAB LG BOWEL ENDOSC | | 6812 | HYSTEROSCOPY |
| 4522 | ENDOSC LG BOWEL THRU ST | | 6995 | INCISION OF CERVIX |
| 4523 | COLONOSCOPY | | 700 | CULDOCENTESIS |
| 4524 | FLEXIBLE SIGMOIDOSCOPY | | 7012 | CULDOTOMY |
| 4543 | ENDOSC DESTRU LG INT LES | | 7021 | VAGINOSCOPY |
| 4549 | DESTRUC LG BOWEL LES NEC | | 7022 | CULDOSCOPY |
| 480 | PROCTOTOMY | | 757 | MANUAL EXPLOR UTERUS P/P |
| 4822 | PROCTOSIGMOIDOSC THRU ST | | 7710 | OTHER BONE INCISION NOS |
| 4823 | RIGID PROCTOSIGMOIDOSCPY | | 8010 | OTHER ARTHROTOMY NOS |
| 4921 | ANOSCOPY | | 8201 | EXPLOR TEND SHEATH-HAND |
| 4945 | HEMORRHOID LIGATION | | 8202 | MYOTOMY OF HAND |
| 500 | HEPATOTOMY | | 8203 | BURSOTOMY OF HAND |
| 5110 | ENDOSC RETRO CHOLANGIOPA | | 8204 | I & D PALMAR/THENAR SPAC |
| 5111 | ENDOSC RETRO CHOLANGIO | | 8209 | INC SOFT TISSUE HAND NEC |
| 5141 | CDE FOR CALCULUS REMOV | | 8301 | TENDON SHEATH EXPLORAT |
| 5142 | CDE FOR OBSTRUCTION NEC | | 8302 | MYOTOMY |
| 5149 | INCIS OBSTR BILE DUC NEC | | 8303 | BURSOTOMY |
| 5151 | COMMON DUCT EXPLORATION | | 8309 | SOFT TISSUE INCISION NEC |
| 5159 | BILE DUCT INCISION NEC | | 850 | MASTOTOMY |

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|------|------------------------|------|------------------------|
| 8603 | INCISION PILONIDAL SINUS | 9925 | INJECT CA CHEMOTHER NEC |
| 8609 | SKIN & SUBQ INCISION NEC | 9929 | INJECT/INFUSE NEC |
| 9621 | DILAT FRONTONASAL DUCT | | |