



# **PEDIATRIC QUALITY INDICATORS (PDI), LOG OF ICD-9-CM AND DRG CODING UPDATES AND REVISIONS TO PDI DOCUMENTATION AND SOFTWARE**

## **Version 4.5**

**Prepared for:**

Agency for Healthcare Research and Quality  
U.S. Department of Health and Human Services  
540 Gaither Road  
Rockville, MD 20850  
<http://www.qualityindicators.ahrq.gov>

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**Prepared by:**

**Battelle**  
505 King Avenue  
Columbus, OH 43201

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## 1.0 Log of ICD-9-CM and DRG Coding Updates and Revisions to PDI Documentation and Software

The following table summarizes the revisions made to the Pediatric Quality Indicators (PDI) software, software documentation and the technical specification documents, since the original release of these documents in February 2006. It also reflects changes to indicator specifications based on updates to ICD-9-CM and MS-DRG codes through Fiscal Year 2013 (effective October 1, 2012) 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 into one of three types:

- 1) fiscal year (FY) coding change: occurs because of coding 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, and
- 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 and DRG/MS-DRG codes valid from October 1, 1994 through September 30, 2013.

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	<p>1. Add numerator inclusion codes for any secondary diagnosis of methicillin resistant staphylococcus aureus septicemia to Criteria #1: 03812 METH RES STAPH AUR SEPT</p> <p>2. Drop numerator inclusion code for secondary diagnosis of (non-neonatal) bacteremia from Criteria #2: 7907 BACTEREMIA</p> <p>3. Add numerator inclusion codes for secondary diagnosis of methicillin resistant staphylococcus aureus and Escherichia coli infection to Criteria #3: 04112 MTH RES STAPH AUR 04141 SHIGA TOXIN-PROD E. COLI 04142 SPEC SHIGA TOXIN-PROD E. COLI OTH 04143 SHIGA TOXIN-PROD E. COLI UNS 04149 SHIGA TOXIN-PROD E. COLI OTH/UNS</p> <p>4. Drop denominator inclusion for transfers into an acute care facility (DISP=2)</p> <p>5. Add denominator inclusion for transfers from another healthcare facility within two days of birth</p> <p>6. Add denominator exclusion codes for selected principal diagnosis of sepsis or bacteremia or secondary diagnosis present on admission of sepsis or bacteremia: 04104 ENTEROCOCCUS GROUP D 04110 STAPHYLOCOCCUS UNSPCFIED 04111 MTH SUS STPH AUR ELS/NOS 04112 MTH RES STAPH AUR</p>

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

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V4.5	May 2013	Postoperative Hemorrhage or Hematoma Rate (PDI 8)	Specification/Calculation	<p>1. Add denominator exclusion codes for any diagnosis code of coagulation disorder:</p> <p>2860 CONG FACTOR VIII DISORDER      2861 CONG FACTOR IX DISORDER      2862 CONG FACTOR XI DISORDER      2863 CONG DEF CLOT FACTOR NEC      2864 VON WILLEBRAND'S DISEASE      28652 ACQUIRED HEMOPHILIA      28659 OT HEM D/T CIRC ANTICOAG      2866 DEFIBRINATION SYNDROME      2867 ACQ COAGUL FACTOR DEF      2869 COAGUL DEFECT NEC NOS</p> <p>2. Add numerator inclusion codes for miscellaneous hemorrhage or hematoma-related procedures:      Codes listed in Appendix C</p>
V4.5	May 2013	All mortality PDI and Postoperative Wound Dehiscence Rate (PDI 11)	Specification/Calculation	<p>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 <math>1 \times 10^9</math>. This change 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.</p> <p>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.</p>
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.

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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	<p>The WinQI software was corrected to address the following issues:</p> <ol style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>3. On the WinQI Additional Options for Data Analysis screen of the Report Wizard, if the “<i>Ref. Pop. Rate</i>” is deselected, and then the expected rate and O/E ratio are reported incorrectly. These rates should be disabled on this screen if “<i>Ref. Pop. Rate</i>” is not selected. This issue has been included in the software documentation.</li> <li>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.</li> <li>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.</li> </ol>
V4.5	May 2013	Neonatal Blood Stream Infection Rate (NQI 3)	Software/Documentation	<ol style="list-style-type: none"> <li>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.</li> <li>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.</li> </ol>

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

VERSION/ REVISION NUMBER	DATE	COMPONENT	NATURE OF CHANGE	CHANGES
V4.5	May 2013	Postoperative Hemorrhage or Hematoma Rate (PDI 8)	Software/Documentation	<p>1. Rename indicator to “Perioperative Hemorrhage or Hematoma Rate.” This change only affected the documentation.</p> <p>Rationale: Cases identified included adverse events that occur both peri- and post-operatively</p> <p>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.</p> <p>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 indicators and cases. This issue was fixed in SAS and WinQI Version 4.5. This change only affected the software.</p>
V4.5	May 2013	Postoperative Respiratory Failure Rate (PDI 9)	Software/Documentation	<p>1. Added the following codes to Neuromuscular disorder diagnosis codes:            35921 MYOTONIC MUSCULAR DYSTRPHY            35929 OTHER MYOTONIC DISORDER            This changed affected both the software and documentation.</p> <p>2. Added the following code to Esophageal resection procedure codes in the technical specification (as it should have been included):            4399 TOTAL GASTRECTOMY NEC            This changed only affected the documentation.</p>
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: 59000 CHR PYELONEPHRITIS NOS 59001 CHR PYELONEPH W MED NECR This change only affected the documentation.

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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)  Add code: 016 AUTOLOGOUS BONE MARROW TRANSPLANT W CC/MCC 017 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

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

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				<p>2. Add denominator inclusion for surgical MS-DRGs (PDI Appendix C)</p> <p>Add code:</p> <p>016 AUTOLOGOUS BONE MARROW TRANSPLANT W CC/MCC      017 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</p>
V4.4	March 2012	Volume of Foreign Body Left During Procedure (PDI 3)	FY Coding Change	<p>Add denominator inclusion for surgical MS-DRGs (PDI Appendix C)</p> <p>Add code:</p> <p>016 AUTOLOGOUS BONE MARROW TRANSPLANT W CC/MCC      017 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</p>
V4.4	March 2012	Iatrogenic Pneumothorax Rate (PDI 5)	FY Coding Change	<p>1. Add denominator exclusions for cardiac procedure</p> <p>Add code:</p> <p>3506 TRNSAPCL REP AORTC VALVE      3508 TRNSAPCL REPL PULM VALVE</p> <p>2. Add denominator inclusion for surgical MS-DRGs (PDI Appendix C)</p> <p>Add code:</p> <p>016 AUTOLOGOUS BONE MARROW TRANSPLANT W CC/MCC      017 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</p>

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

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

VERSION/ REVISION NUMBER	DATE	COMPONENT	NATURE OF CHANGE	CHANGES
				<p>Remove code:</p> <p>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</p> <p>3. Add denominator inclusion for surgical MS-DRGs (PDI Appendix C)</p> <p>Add code:</p> <p>016 AUTOLOGOUS BONE MARROW TRANSPLANT W CC/MCC      017 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</p>

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

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

VERSION/ REVISION NUMBER	DATE	COMPONENT	NATURE OF CHANGE	CHANGES
				<p>6. Add denominator inclusion for surgical MS-DRGs (PDI Appendix C)</p> <p>Add code:</p> <p>016 AUTOLOGOUS BONE MARROW TRANSPLANT W CC/MCC      017 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</p>

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

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				<p>5. Remove numerator inclusion for diagnosis of sepsis</p> <p>Remove code: 998.0 POSTOPERATIVE SHOCK, NOS</p> <p>6. Add denominator inclusions operating room procedure codes (PDI Appendix A)</p> <p>Add code:</p> <p>0221 INSERT/REPLACE EVD      0222 INTRCRAN VENT SHUNT/ANAS      1267 INSERT AQUEOUS DRAIN DEV      1753 PERC ATER EXTRACRAN VSL      1754 PERC ATER INTRACRAN VSL      1755 TRANSLUM COR ATHERECTOMY      1756 ATER OTH NON-VOR VESSEL      3500 CLOSED VALVOTOMY NOS      3505 ENDOVAS REPL AORTC VALVE      3506 TRNSAPCL REP AORTC VALVE      3507 ENDOVAS REPL PULM VALVE      3508 TRNSAPCL REPL PULM VALVE      3509 ENDOVAS REPL UNS HRT VLV      3826 INSRT PRSR SNSR W/O LEAD      3977 TEMP ENDOVSC OCCLS VESSL      3978 ENDOVAS IMPLN GRFT AORTA      4382 LAP VERTICAL GASTRECTOMY      6824 UTERINE ART EMB W COILS      6825 UTERINE ART EMB W/O COIL</p> <p>Remove code:</p> <p>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</p>

VERSION/ REVISION NUMBER	DATE	COMPONENT	NATURE OF CHANGE	CHANGES
				<p>7. Add denominator and stratification inclusion for surgical MS-DRGs (PDI Appendix C)</p> <p>Add code:</p> <p>016 AUTOLOGOUS BONE MARROW TRANSPLANT W CC/MCC      017 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</p>

VERSION/ REVISION NUMBER	DATE	COMPONENT	NATURE OF CHANGE	CHANGES
V4.4	March 2012	Postoperative Wound Dehiscence Rate (PDI 11)	FY Coding Change	<p>1. Add denominator inclusion for abdominopelvic procedures</p> <p>Add code: 4382 LAP VERTICAL GASTRECTOMY</p> <p>2. Add denominator exclusion for diagnosis of high-risk immunocompromised state (PDI Appendix F)</p> <p>Add code: 28411 ANTIN CHEMOP INDCD PANCYT 28412 OTH DRG INDCD PANCYTOPNA 28419 OTHER PANCYTOPENIA 99688 COMP TP ORGAN-STEM CELL</p> <p>3. Add denominator exclusion for diagnosis of intermediate-risk immunocompromised state (PDI Appendix G)</p> <p>Add code: 5735 HEPATOPULMONARY SYNDROME</p> <p>4. Add stratification inclusion for surgical MS-DRGs</p> <p>Add code: 016 AUTOLOGOUS BONE MARROW TRANSPLANT W CC/MCC 017 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</p>

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	<p>1. Add numerator definition for diagnosis of central venous catheter-related blood stream infections diagnosed on or after October 1, 2011.  Add code:  99931 OTH/UNS INF-CEN VEN CATH  99932 BLOOD INF DT CEN VEN CTH</p> <p>2. Add denominator inclusion for surgical MS-DRGs (PDI Appendix C)  Add code:  016 AUTOLOGOUS BONE MARROW TRANSPLANT W CC/MCC  017 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</p> <p>3. Add denominator exclusion for diagnosis of high- risk immunocompromised state (PDI Appendix F)  Add code:  28411 ANTIN CHEMOP INDCD PANCYT  28412 OTH DRG INDCD PANCYTOPNA  28419 OTHER PANCYTOPENIA  99688 COMP TP ORGAN-STEM CELL</p> <p>4. Add denominator exclusion for diagnosis of intermediate-risk immunocompromised state (PDI Appendix G)  Add code:  5735 HEPATOPULMONARY SYNDROME</p>

VERSION/ REVISION NUMBER	DATE	COMPONENT	NATURE OF CHANGE	CHANGES
V4.4	March 2012	Transfusion Reaction Volume (PDI 13)	FY Coding Change	<p>Add denominator inclusion for surgical MS-DRGs (PDI Appendix C)</p> <p>Add code:</p> <p>016 AUTOLOGOUS BONE MARROW TRANSPLANT W CC/MCC      017 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</p>
V4.4	March 2012	Asthma Admission Rate (PDI 14)	FY Coding Change	<p>Add denominator exclusion code for cystic fibrosis and anomalies of the respiratory system</p> <p>Add code:</p> <p>51661 NEUROEND CELL HYPRPL INF      51662 PULM INTERSTITL GLYCOGEN      51663 SURFACTANT MUTATION LUNG      51664 ALV CAP DYSP W VN MISALN      51669 OTH INTRST LUNG DIS CHLD</p>
V4.4	March 2012	Urinary Tract Infection Admission Rate (PDI 18)	FY Coding Change	<p>1. Add denominator exclusion for diagnosis of high-risk immunocompromised state (PDI Appendix F)</p> <p>Add code for high-risk:</p> <p>28411 ANTIN CHEMOP INDCD PANCYT      28412 OTH DRG INDCD PANCYTOPNA      28419 OTHER PANCYTOPENIA      99688 COMP TP ORGAN-STEM CELL</p> <p>2. Add denominator exclusion for diagnosis of intermediate-risk immunocompromised state (PDI Appendix G)</p> <p>Add code for intermediate risk:</p> <p>5735 HEPATOPULMONARY SYNDROME</p>

VERSION/ REVISION NUMBER	DATE	COMPONENT	NATURE OF CHANGE	CHANGES
V4.4	March 2012	Neonatal Iatrogenic Pneumothorax Rate (NQI 1)	FY Coding Change	<p>1. Add denominator exclusion code for cardiac procedure  Add code:  3506 TRNSAPCL REP AORTC VALVE  3508 TRNSAPCL REPL PULM VALVE</p> <p>2. Add denominator inclusion for surgical MS-DRGs (PDI Appendix C)  Add code:  016 AUTOLOGOUS BONE MARROW TRANSPLANT W CC/MCC  017 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</p>

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

VERSION/ REVISION NUMBER	DATE	COMPONENT	NATURE OF CHANGE	CHANGES
				<p>4. Add/remove denominator inclusion for Operating Room Procedure Codes (PDI Appendix A)</p> <p>Add code:</p> <p>0221 INSERT/REPLACE EVD      0222 INTRCRAN VENT SHUNT/ANAS      1267 INSERT AQUEOUS DRAIN DEV      1753 PERC ATHER EXTRACRAN VSL      1754 PERC ATHER INTRACRAN VSL      1755 TRANSLUM COR ATHERECTOMY      1756 ATHER OTH NON-VOR VESSEL      3500 CLOSED VALVOTOMY NOS      3505 ENDOVAS REPL AORTC VALVE      3506 TRNSAPCL REP AORTC VALVE      3507 ENDOVAS REPL PULM VALVE      3508 TRNSAPCL REPL PULM VALVE      3509 ENDOVAS REPL UNS HRT VLV      3826 INSRT PRSR SNSR W/O LEAD      3977 TEMP ENDOVSC OCCLS VESSL      3978 ENDOVAS IMPLN GRFT AORTA      4382 LAP VERTICAL GASTRECTOMY      6824 UTERINE ART EMB W COILS</p> <p>Remove code:</p> <p>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      6825 UTERINE ART EMB W/O COIL</p>
V4.4	March 2012	Software	Software/ Documentaion	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/ Documentaion	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/ Documentaion	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/ Documentaion	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/ Documentaion	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/ Documentaion	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/ Documentaion	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/ Documentaion	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/ Documentaion	WinQI v4.3 was not properly calculating quarterly rates when requested by the user. This issue was fixed in v4.4 of WinQI.

VERSION/ REVISION NUMBER	DATE	COMPONENT	NATURE OF CHANGE	CHANGES
V4.4	March 2012	Software	Software/ Documentaion	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 fixed in v4.4 of SAS.
V4.4	March 2012	Software	Software/ Documentaion	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/ Documentaion	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/ Documentaion	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/ Documentaion	PDI 09: Modified the order of denominator exclusion/inclusions and numerator flags.
V4.4	March 2012	Software	Software/ Documentaion	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/ Documentaion	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/ Documentaion	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/ Documentaion	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 THRMLSTY, 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 INCOMPAT/DELAY HTR 99974 RH INCOMPAT REACTION NEC

VERSION/ REVISION NUMBER	DATE	COMPONENT	NATURE OF CHANGE	CHANGES
V4.3	April 2011	AHRQ Procedure Class	Coding	<p>Add to procedure class:</p> <p>Class 1: 1771 NON-CORONARY IFVA</p> <p>Class 2: 0060 INS D-E STNT SUP FEM ART 3897 CV CATH PLCMT W GUIDANCE</p> <p>Class 4: 0120 IMP/REPL BRAIN PULSE GEN 0129 REM BRAIN PULSE GENERATR 3227 BRNC THRMPPLSTY 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</p>

VERSION/ REVISION NUMBER	DATE	COMPONENT	NATURE OF CHANGE	CHANGES
V4.3	April 2011	Major Operating Room Procedure	Coding	<p>Add codes:</p> <p>0120 IMP/REPL BRAIN PULSE GEN      0129 REM BRAIN PULSE GENERATR      3227 BRNC THRMPPLSTY 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 SHLDRE 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</p>

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

VERSION/ REVISION NUMBER	DATE	COMPONENT	NATURE OF CHANGE	CHANGES
				<p>CCS 213: V1365 HX-CONG MALFORM-HEART</p> <p>CCS 214: V1367 HX-CONG MALFORM-DIGEST</p> <p>CCS 215: 75231 AGENESIS OF UTERUS 75232 HYPOPLASIA OF UTERUS 75233 UNICORNuate UTERUS 75234 BICORNuate UTERUS 75235 SEPTATE UTERUS 75236 ARCUATE UTERUS 75239 ANOMALIES OF UTERUS NEC 75243 CERVIAL AGENESIS 75244 CERVICAL DUPLICATION 75245 VAGINAL AGENESIS 75246 TRANSV VAGINAL SEPTUM 75247 LONGITUD VAGINAL SEPTUM V1362 HX-CONG MALFORM-CU</p> <p>CCS 216: V1363 HX-CONG MALFORM-NERVOUS</p> <p>CCS 217: V1364 HX-CONG MALFORM-EYE,FACE V1366 HX-CONG MALFORM-RESP SYS V1368 HX-CONG MALFORM-SKIN,MS</p> <p>CCS 654: 31535 CHLDHD ONSET FLNCY DISOR</p>
V4.3	April 2011	Surgical MS-DRG	Coding	Add to numerator inclusion for Surgical D RG 014 ALLOGENIC BONE MARROW TRANSPLANT 015 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 670.02 Major puerperal Infection NOS-del p/p 670.04 Major puerperal infection NOS-p/p 670.10 Puerperal endometritis-unsp 670.12 Puerperal endometritis del w p/p 670.14 Puerperal endometritis-postpart 670.20 Puerperal sepsis-unsp 670.22 Puerperal sepsis-del w p/p 670.24 Puerperal sepsis-postpart 670.30 Puerperal septic thrombophlebitis-unsp 670.32 Puerperal septic thrombophlebitis-del w p/p 670.34 Puerperal septic thrombophlebitis-postpart 670.80 Major puerperal infection NEC-suspec 670.82 Major puerperal infection NEC-dl w p/p 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 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: 0049 Superstat O2 Therapy 0058 Ins Intra-anstm Pres Mntr 0059 Intravasc Msmnt Cor Art 0067 Intravas Msmnt Thorc Art 0068 Intravas MsMt Periph Art 0069 Intravs Msmt Ves NEC/NOS 1751 Implant CCM, total system 1752 Implant CCM pulse gentr 1761 LITT lesn brain, guidance 1762 LITT les hd/nck, guidance 1763 LITT lesn liver, guidance 1769 LITT lesn, guide oth/NOS 1770 Intravenous Infusion of Clofarabine 3373 Endo ins/re brnc val, mul 3824 Intravas img corves OCT 3825 Intravas img non-cor OCT 3975 Endo emb hd/nk, bare coil 3976 Endo em hed/nk, bioac coil 4686 Endo insrt colonic stent 4687 Insert colonic stent NEC 3850 ABDPERNEAL RES RECTM NOS 8570 TOTL RECONSTC Breast NOS

VERSION/ REVISION NUMBER	DATE	COMPONENT	NATURE OF CHANGE	CHANGES
V4.2	September 30, 2010	Multiple PDI Indicators	Coding	<p>Change procedure codes:</p> <p>3760 Imp Bivn Ext Hrt Ast Sys          4840 Pull-thru Res Rectum NOS</p> <p>Change procedure codes category assignments:</p> <p>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</p>

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

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)  Add codes: 80.53 Repair of the annulus fibrosus with graft or prosthesis 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)  Add code: 707.20 PRESSURE ULCER, STAGE NOS 707.21 PRESSURE ULCER, STAGE I 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)  Add code: 53.71 Laparoscopic repair of diaphragmatic hernia, abdominal approach 53.72 Other and open repair of diaphragmatic hernia, abdominal approach 53.75 Repair of diaphragmatic hernia, abdominal approach, NOS 55.83 Laparoscopic repair of diaphragmatic hernia, with thoracic approach 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)  Add code: 511.81 Malignant pleural effusion 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.  Add code: 37.36 Excision or destruction of left atrial appendage (LAA) 37.55 Removal of internal biventricular heart replacement system 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	<p>Add procedure code to denominator inclusion for procedures to repair congenital heart defect (\$PRPED1P)</p> <p>Add code: 37.36 Excision or destruction of left atrial appendage (LAA)</p>
V4.0	February 25, 2009	Postoperative Sepsis (PDI 10) Numerator (Inclusion, sepsis)	Coding	<p>Add diagnosis code to numerator inclusion for sepsis (\$SEPTIID)</p> <p>Modify code: 038.11 Methicillin susceptible staphylococcus aureus septicemia</p> <p>Add code: 038.12 Methicillin resistant Staphylococcus aureus septicemia</p>
V4.0	February 25, 2009	Postoperative Wound Dehiscence (PDI 11) Denominator (Inclusion, abdominopelvic procedures)	Coding	<p>Add procedure codes to denominator inclusion for abdominopelvic procedures (\$ABDOMIP)</p> <p>Add codes:</p> <ul style="list-style-type: none"> <li>17.31 Laparoscopic multiple segmental resection of large intestine</li> <li>17.32 Laparoscopic cecectomy</li> <li>17.33 Laparoscopic right hemicolectomy</li> <li>17.34 Laparoscopic resection of transverse colon</li> <li>17.35 Laparoscopic left hemicolectomy</li> <li>17.36 Laparoscopic sigmoidectomy</li> <li>17.39 Other laparoscopic partial excision of large intestine</li> <li>45.81 Laparoscopic total intra-abdominal colectomy</li> <li>45.82 Open total intra-abdominal colectomy</li> <li>45.83 Other and unspecified total intra-abdominal colectomy</li> <li>48.40 Pull-through resection of rectum, not otherwise specified</li> <li>48.43 Open pull-through resection of rectum</li> <li>48.50 Abdominoperineal resection of the rectum, NOS</li> <li>48.52 Open abdominoperineal resection of the rectum</li> <li>48.59 Other abdominoperineal resection of the rectum</li> <li>53.75 Repair of diaphragmatic hernia, abdominal approach, NOS</li> </ul>

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

VERSION/ REVISION NUMBER	DATE	COMPONENT	NATURE OF CHANGE	CHANGES
V4.0	February 25, 2009	Multiple – Immunocompromised Denominator (Exclusion, high risk immuno-compromised)	Coding	<p>Add diagnosis codes to denominator exclusion for high risk immunocompromised (\$IMMUNHD)</p> <p>Add codes:</p> <ul style="list-style-type: none"> <li>199.2 Malignant neoplasm associated with transplanted organ</li> <li>238.79 Other lymphatic and hematopoietic tissues</li> <li>238.77 Post-transplant lymphoproliferative disorder</li> <li>279.50 Graft-versus-host disease, unspecified</li> <li>279.51 Acute graft-versus-host disease</li> <li>279.52 Chronic graft-versus-host disease</li> <li>279.53 Acute on chronic graft-versus-host disease</li> <li>V45.11 Renal dialysis status</li> </ul> <p>Add codes:</p> <ul style="list-style-type: none"> <li>203.02 MULT MYELOMA IN RELAPSE</li> <li>203.12 PLSM CEL LEUK IN RELAPSE</li> <li>203.82 OTH IMNPRLF NEO-RELAPSE</li> <li>204.02 ACT LYMP LEUK IN RELAPSE</li> <li>204.12 CHR LYMP LEUK IN RELAPSE</li> <li>204.22 SBAC LYM LEUK IN RELAPSE</li> <li>204.82 OTH LYM LEUK IN RELAPSE</li> <li>204.92 LYMP LEUK NOS RELAPSE</li> <li>205.02 ACT MYEL LEUK IN RELAPSE</li> <li>205.12 CHR MYEL LEUK IN RELAPSE</li> <li>205.22 SBAC MYL LEUK IN RELAPSE</li> <li>205.32 MYEL SARCOMA IN RELAPSE</li> <li>205.82 OTH MYEL LEUK IN RELAPSE</li> <li>205.92 MYEL LEUK NOS IN RELAPSE</li> <li>206.02 ACT MONO LEUK IN RELAPSE</li> <li>206.12 CHR MONO LEUK IN RELAPSE</li> <li>206.22 SBAC MONO LEU IN RELAPSE</li> <li>206.82 OTH MONO LEUK IN RELAPSE</li> <li>206.92 MONO LEUK NOS RELAPSE</li> </ul>

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	<p>Add diagnosis codes to denominator exclusion for infection (\$INFECID)</p> <p>Modify codes:</p> <ul style="list-style-type: none"> <li>038.11 Methicillin susceptible staphylococcus aureus septicemia</li> <li>041.11 Methicillin susceptible staphylococcus aureus</li> <li>482.41 Methicillin susceptible pneumonia due to staphylococcus aureus</li> </ul> <p>Add codes:</p> <ul style="list-style-type: none"> <li>038.12 Methicillin resistant Staphylococcus aureus septicemia</li> <li>041.12 Methicillin resistant Staphylococcus aureus (MRSA)</li> <li>482.42 Methicillin resistant pneumonia due to staphylococcus aureus</li> <li>707.20 Pressure ulcer unspecified stage</li> <li>707.22 Pressure ulcer stage II</li> <li>707.23 Pressure ulcer stage III</li> <li>707.24 Pressure ulcer stage IV</li> <li>777.50 Necrotizing enterocolitis in newborn, unspecified</li> <li>777.51 Stage I necrotizing enterocolitis in newborn</li> <li>777.52 Stage II necrotizing enterocolitis in newborn</li> <li>777.53 Stage III necrotizing enterocolitis in newborn</li> </ul> <p>Delete codes (for discharges after 2008Q4 effective October 1, 2008):</p> <ul style="list-style-type: none"> <li>707.00 PRESSURE ULCER, SITE NOS</li> <li>707.01 PRESSURE ULCER, ELBOW</li> <li>707.02 PRESSURE ULCER, UPR BACK</li> <li>707.03 PRESSURE ULCER, LOW BACK</li> <li>707.04 PRESSURE ULCER, HIP</li> <li>707.05 PRESSURE ULCER, BUTTOCK</li> <li>707.06 PRESSURE ULCER, ANKLE</li> <li>707.07 PRESSURE ULCER, HEEL</li> <li>707.09 PRESSURE ULCER, SITE NEC</li> </ul>

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)  Add code: 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)  Add codes: 05.22 Sympathectomy Cervical 05.23 Sympathectomy Lumbar 05.29 Other sympathectomy and ganglionectomy 07.80 Thymectomy, not otherwise specified 07.81 Other partial excision of thymus 07.82 Other total excision of thymus 07.83 Thoracoscopic partial excision of thymus 07.84 Thoracoscopic total excision of thymus 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	<p>Add denominator exclusion for craniofacial anomalies with 1) a procedure code for laryngeal or pharyngeal surgery (\$CRANI1P) <i>or</i> 2) a procedure on face (\$CRANI2P) <i>and</i> a diagnosis code of craniofacial abnormalities (\$CRANIID).</p> <p>Add codes for pharyngeal surgery (\$CRANI1P):</p> <ul style="list-style-type: none"> <li>25.3 Complete glossectomy</li> <li>25.4 Radical glossectomy</li> <li>27.31 Local excision or destruction of lesion or tissue of bony palate</li> <li>29.0 Pharyngotomy</li> <li>29.33 Pharyngectomy (partial)</li> <li>29.39 Other excision or destruction of lesion or tissue of pharynx</li> <li>29.4 Plastic operation on pharynx</li> <li>29.53 Closure of other fistula of pharynx</li> <li>29.59 Other repair of pharynx</li> <li>29.91 Dilation of pharynx</li> <li>30.09 Other excision or destruction of lesion or tissue of larynx</li> <li>30.21 Epiglottidectomy</li> <li>30.22 Vocal cordectomy</li> <li>30.29 Other partial laryngectomy</li> <li>30.3 Complete laryngectomy</li> <li>30.4 Radical laryngectomy</li> <li>31.3 Other incision of larynx or trachea</li> <li>31.5 Local excision or destruction of lesion or tissue of trachea</li> <li>31.69 Other repair of larynx</li> <li>31.73 Closure of other fistula of trachea</li> <li>31.75 Reconstruction of trachea and construction of artificial larynx</li> <li>31.79 Other repair and plastic operations on trachea</li> <li>31.98 Other operations on larynx</li> <li>31.99 Other operations on trachea</li> </ul>

VERSION/ REVISION NUMBER	DATE	COMPONENT	NATURE OF CHANGE	CHANGES
				<p>Add codes for procedure on face (\$CRANI2P):</p> <p>25.2 Partial glossectomy</p> <p>25.59 Other repair and plastic operations on tongue</p> <p>27.32 Wide excision or destruction of lesion or tissue of bony palate</p> <p>27.62 Correction of cleft palate</p> <p>27.63 Revision of cleft palate repair</p> <p>27.69 Other plastic repair of palate</p> <p>29.31 Cricopharyngeal myotomy</p> <p>76.65 Segmental osteoplasty [osteotomy] of maxilla</p> <p>76.66 Total osteoplasty [osteotomy] of maxilla</p> <p>76.46 Other reconstruction of other facial bone</p> <p>76.69 Other facial bone repair</p> <p>76.91 Bone graft to facial bone</p> <p>Add codes for craniofacial abnormalities (\$CRANIID).</p> <p>744.83 Macrostomia</p> <p>744.84 Microstomia</p> <p>744.9 Unspecified anomalies of face and neck</p> <p>748.3 Congenital anomalies of skull and face bones</p> <p>756.0 Tracheomalacia and congenital tracheal stenosis</p>
V4.0	February 25, 2009	Postoperative Sepsis (PDI 10) Numerator (Inclusion)	Indicator Specification Change	<p>Remove diagnosis code from numerator inclusion for sepsis (\$SEPTIID) for discharges after 2004Q4 (effective October 1, 2004)</p> <p>Drop code:</p> <p>785.59 Shock without mention of trauma, other</p>
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	<p>Add diagnosis code to numerator exclusion for gastrointestinal abnormalities (\$ACGDISD)</p> <p>Add code: 538 Gastrointestinal mucositis (ulcerative)</p>
V4.0	February 25, 2009	Multiple – Infection Denominator (Exclusion, infection)	Indicator Specification Change	<p>Remove diagnosis codes for non-bacterial infections from denominator exclusion for infection (\$INFECID)</p> <p>Drop codes:</p> <ul style="list-style-type: none"> <li>376.00 ACUTE INFLAM NOS, ORBIT</li> <li>386.30 LABYRINTHITIS NOS</li> <li>386.31 SEROUS LABYRINTHITIS</li> <li>386.32 CIRCUMSCRI LABYRINTHITIS</li> <li>598.00 URETHR STRICT:INFEKT NOS</li> <li>598.01 URETH STRICT:OTH INFEKT</li> <li>686.01 PYODERMA GANGRENOSUM</li> </ul> <p>Add diagnosis code to denominator exclusion for infection (\$INFECID)</p> <p>Add codes:</p> <ul style="list-style-type: none"> <li>078.3 CAT-SCRATCH DISEASE</li> </ul>

VERSION/ REVISION NUMBER	DATE	COMPONENT	NATURE OF CHANGE	CHANGES
V4.0	February 25, 2009	Multiple – Major Operating Room Procedures Denominator (Inclusion)	Indicator Specification Change	<p>Remove procedure codes from the denominator inclusion for major operating room procedures (\$ORPROC)</p> <p>Drop codes:</p> <ul style="list-style-type: none"> <li>38.7 INTERRUPTION VENA CAVA</li> <li>41.0 LYMPH STRUCTURE OP NEC</li> <li>41.00 BONE MARROW TRNSPLNT NOS</li> <li>41.01 AUTO BONE MT W/O PURG</li> <li>41.02 ALO BONE MARROW TRNSPLNT</li> <li>41.03 ALLOGRFT BONE MARROW NOS</li> <li>41.04 AUTO HEM STEM CT W/O PUR</li> <li>41.05 ALLO HEM STEM CT W/O PUR</li> <li>41.06 CORD BLD STEM CELL TRANS</li> <li>41.07 AUTO HEM STEM CT W PURG</li> <li>41.08 ALLO HEM STEM CT W PURG</li> <li>41.09 AUTO BONE MT W PURGING</li> </ul>
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. 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. 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. 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) PedQI #4/#5 – Added exclusion for cases with ICD-9-CM procedure code of diaphragmatic surgery repair 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) Deleted ICD-9-CM procedure code 41.0 from the list of major operating room procedure codes 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	<p>Corrected ICD-9-CM diagnosis codes 590.00 and 590.01 in the numerator exclusion for PedQI #18.</p> <p>Dropped ICD-9-CM diagnosis codes 585.1, 585.2, 585.3, 585.4 and 585.9 from the high risk immunocompromised state specification.</p> <p>Added ICD-9-CM diagnosis codes 276.50, 276.51 and 276.52 to the numerator specification for PedQI #16.</p> <p>Refined the definition of neonate by dropping the DRG and MDC inclusion criteria.</p> <p>Refined the newborn definition by requiring that age in days be equal to zero (or missing if there is a liveborn diagnosis code).</p>
V 3.0	February 20, 2006	Technical Specifications and Software	Software/ Documents	<p>Dropped ICD-9-CM diagnosis code 5185 from numerator specification for PedQI #9.</p> <p>Dropped exclusion of all newborns and neonates transferring from another institution, added exclusion of neonates for PedQI #10.</p>

## 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-SUBLV-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 IMPAIRED
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 ERT/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 EMBOLISM
20922	MALIG CARCINOID THYMUS	4162	CHR PULMONARY EMBOLISM
20924	MALIG CARCINOID KIDNEY	42682	LONG QT SYNDROME
20924	MALIG CARCINOID KIDNEY	51181	MALIGNANT PLEURAL EFFUSION
20925	MAL CARCINOID FOREGUT NOS	53013	EOSINOPHILIC ESOPHAGITIS
20926	MAL CARCINOID MIDGUT NOS	57142	AUTOIMMUNE HEPATITIS
20927	MAL CARCINOID 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 DEFICNT	76061	AMNIOCENTESIS AFFECT NB
25801	MULT ENDO NEOPLAS TYPE I	76062	IN UTERO PROC NEC AFF NB
25950	ANDROGEN INSENSITVITY NOS	76063	MAT SURG DUR PREG AFF NB
25951	ANDROGEN INSENSITVITY SYN	76064	PREV MATERN SURG AFF NB
25952	PART ANDROGEN INSNSITVITY	77750	NEC ENTEROCOLITIS 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 BILIUS 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 MUSCULOSKLEL 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

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	DESTRU 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

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