AHRQ Quality Indicators[TM]

TECHNICAL SPECIFICATIONS: PREVENTION QUALITY INDICATORS APPENDICES
Version 5.0

Prepared for:
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http://www.qualityindicators.ahrq.gov

Contract No. HHSA290201200003I, Task Order 4
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March 2015

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Appendix A – Admission Codes for Transfers

SID ASOURCE Codes

2 - Another hospital
3 - Another facility, including long-term care

POINTOFORIGINUB04 Codes

4 - Transfer from a hospital
5 - Transfer from a Skilled Nursing Facility (SNF) or Intermediate Care Facility (ICF)
6 - Transfer from another health care facility

If Admission Type is newborn (ATYPE=4), POINTOFORIGINUB04 codes are as follows:
5 - Born inside this hospital
6 - Born outside of this hospital

Appendix B – Cardiac Procedure Codes

ICD-9-CM Cardiac procedure codes[11]:

0050	IMPL CRT PACEMAKER SYS		3601	PTCA-1 VESSEL W/O AGENT
0051	IMPL CRT DEFIBRILLAT		3602	PTCA-1 VESSEL WITH AGNT
0052	IMP/REP LEAD LF VEN SYS		3603	OPEN CORONRY ANGIOPLASTY
0053	IMP/REP CRT PACEMKR GEN		3604	INTRCORONRY THROMB INFUS
0054	IMP/REP CRT DEFIB GENAT		3605	PTCA-MULTIPLE VESSEL
0056	INS/REP SENS-CRD/VSL MTR		3606	INS NONDRUG ELUT COR ST
0057	IMP/REP SUBCUE CARD DEV		3607	INS DRUG-ELUT CORONRY ST
0066	PTCA		3609	REM OF COR ART OBSTR NEC
1751	IMPLANT CCM,TOTAL SYSTEM		3610	AORTOCORONARY BYPASS NOS
1752	IMPLANT CCM PULSE GENRTR		3611	AORTOCOR BYPAS-1 COR ART
1755	TRANSLUM COR ATHERECTOMY		3612	AORTOCOR BYPAS-2 COR ART
3500	CLOSED VALVOTOMY NOS		3613	AORTOCOR BYPAS-3 COR ART
3501	CLOSED AORTIC VALVOTOMY		3614	AORTCOR BYPAS-4+ COR ART
3501	CLOSED AORTIC VALVOTOMY		3615	1 INT MAM-COR ART BYPASS
3502	CLOSED MITRAL VALVOTOMY		3616	2 INT MAM-COR ART BYPASS
3503	CLOSED PULMON VALVOTOMY		3617	ABD-CORON ARTERY BYPASS
3504	CLOSED TRICUSP VALVOTOMY		3619	HRT REVAS BYPS ANAS NEC
3505	ENDOVAS REPL AORTC VALVE		362	ARTERIAL IMPLANT REVASC
3506	TRNSAPCL REP AORTC VALVE		363	OTH HEART REVASCULAR
3507	ENDOVAS REPL PULM VALVE		3631	OPEN CHEST TRANS REVASC
3508	TRNSAPCL REPL PULM VALVE		3632	OTH TRANSMYO REVASCULAR
3509	ENDOVAS REPL UNS HRT VLV		3633	ENDO TRANSMYO REVASCULAR
3510	OPEN VALVULOPLASTY NOS		3634	PERC TRANSMYO REVASCULAR
3511	OPN AORTIC VALVULOPLASTY		3639	OTH HEART REVASULAR
3512	OPN MITRAL VALVULOPLASTY		3691	CORON VESS ANEURYSM REP
3513	OPN PULMON VALVULOPLASTY		3699	HEART VESSEL OP NEC
3514	OPN TRICUS VALVULOPLASTY		3731	PERICARDIECTOMY
3520	OPN/OTH REP HRT VLV NOS		3732	HEART ANEURYSM EXCISION
3521	OPN/OTH REP AORT VLV-TIS		3733	EXC/DEST HRT LESION OPEN
3522	OPN/OTH REP AORTIC VALVE		3734	EXC/DEST HRT LES OTHER
3523	OPN/OTH REP MTRL VLV-TIS		3735	PARTIAL VENTRICULECTOMY
3524	OPN/OTH REP MITRAL VALVE		3736	EXC,DESTRCT,EXCLUS LAA
3525	OPN/OTH REP PULM VLV-TIS		3737	EXC/DEST HRT LES, THRSPC
3526	OPN/OTH REPL PUL VALVE		3741	IMPL CARDIAC SUPPORT DEV
3527	OPN/OTH REP TCSPD VLV-TS		375	HEART TRANSPLANTATION
3528	OPN/OTH REPL TCSPD VALVE		3751	HEART TRANPLANTATION
3531	PAPILLARY MUSCLE OPS		3752	IMP TOT INT BI HT RP SYS
3532	CHORDAE TENDINEAE OPS		3753	REPL/REP THR UNT TOT HRT
3533	ANNULOPLASTY		3754	REPL/REP OTH TOT HRT SYS
3534	INFUNDIBULECTOMY		3755	REM INT BIVENT HRT SYS
3535	TRABECUL CARNEAE CORD OP		3760	IMP BIVN EXT HRT AST SYS
3539	TISS ADJ TO VALV OPS NEC		3761	PULSATION BALLOON IMPLAN
3541	ENLARGE EXISTING SEP DEF		3762	INSRT NON-IMPL CIRC DEV
3542	CREATE SEPTAL DEFECT		3763	REPAIR HEART ASSIST SYS
3550	PROSTH REP HRT SEPTA NOS		3764	REMVE EXT HRT ASSIST SYS
3551	PROS REP ATRIAL DEF-OPN		3765	IMP VENT EXT HRT AST SYS
3552	PROS REPAIR ATRIA DEF-CL		3766	IMPLANTABLE HRT ASSIST
3553	PROS REP VENTRIC DEF-OPN		3770	INT INSERT PACEMAK LEAD
3554	PROS REP ENDOCAR CUSHION		3771	INT INSERT LEAD IN VENT
3555	PROS REP VENTRC DEF-CLOS		3772	INT INSER LEAD ATRI-VENT
3560	GRFT REPAIR HRT SEPT NOS		3773	INT INSER LEAD IN ATRIUM
3561	GRAFT REPAIR ATRIAL DEF		3774	INT OR REPL LEAD EPICAR
3562	GRAFT REPAIR VENTRIC DEF		3775	REVISION OF LEAD
3563	GRFT REP ENDOCAR CUSHION		3776	REPL TV ATRI-VENT LEAD
3570	HEART SEPTA REPAIR NOS		3777	REMOVAL OF LEAD W/O REPL
3571	ATRIA SEPTA DEF REP NEC		3778	INSER TEAM PACEMAKER SYS
3572	VENTR SEPTA DEF REP NEC		3779	REV/RELOC CARD DEV POCKT

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[1] The procedure or diagnosis codes are continuously updated. The current list of ICD-9-CM codes is valid for October 2012 through September 2013. Italicized codes are not active in Fiscal Year 2013.

3573	ENDOCAR CUSHION REP NEC		3780	INT OR REPL PERM PACEMKR
3581	TOT REPAIR TETRAL FALLOT		3781	INT INSERT 1-CHAM, NON
3582	TOTAL REPAIR OF TAPVC		3782	INT INSERT 1-CHAM, RATE
3583	TOT REP TRUNCUS ARTERIOS		3783	INT INSERT DUAL-CHAM DEV
3584	TOT COR TRANSPOS GRT VES		3785	REPL PACEM W 1-CHAM, NON
3591	INTERAT VEN RETRN TRANSP		3786	REPL PACEM 1-CHAM, RATE
3592	CONDUIT RT VENT-PUL ART		3787	REPL PACEM W DUAL-CHAM
3593	CONDUIT LEFT VENTR-AORTA		3789	REVISE OR REMOVE PACEMAK
3594	CONDUIT ARTIUM-PULM ART		3794	IMPLT/REPL CARDDEFIB TOT
3595	HEART REPAIR REVISION		3795	IMPLT CARDIODEFIB LEADS
3596	PERC BALLOON VALVUPLASTY		3796	IMPLT CARDIODEFIB GENRATR
3597	PERC MTRL VLV REPR W IMP		3797	REPL CARDIODEFIB LEADS
3598	OTHER HEART SEPTA OPS		3798	REPL CARDIODEFIB GENRATR
3599	OTHER HEART VALVE OPS		3826	INSRT PRSR SNSR W/O LEAD

Appendix C – Immunocompromised State Diagnosis and Procedure Codes

ICD-9-CM Immunocompromised state diagnosis codes[1]:

042	HUMAN IMMUNODEFICIENCY VIRUS DISEASE	2882	GENETIC ANOMALY LEUKOCYT
1363	PNEUMOCYSTOSIS	2884	HEMOPHAGOCYTIC SYNDROMES
1992	MALIG NEOPL-TRANSP ORGAN	28850	LEUKOCYTOPENIA NOS
23873	HI GRDE MYELODYS SYN LES	28851	LYMPHOCYTOPENIA
23876	MYELOFI W MYELO METAPLAS	28859	DECREASED WBC COUNT NEC
23877	POST TP LYMPHPROLIF DIS	28953	NEUTROPENIC SPLENOMEGALY
23879	LYMPH/HEMATPOITC TIS NEC	28983	MYELOFIBROSIS
260	KWASHIORKOR	40301	MAL HYP KIDNEY W CHR KID
261	NUTRITIONAL MARASMUS	40311	BEN HYP KIDNEY W CHR KID
262	OTH SEVERE MALNUTRITION	40391	HYP KIDNEY NOS W CHR KID
27900	HYPOGAMMAGLOBULINEM NOS	40402	MAL HY HRT/KID W CHR KID
27901	SELECTIVE IGA IMMUNODEF	40403	MAL HYP HRT/KID W HF/KID
27902	SELECTIVE IGM IMMUNODEF	40412	BEN HYP HT/KID W CHR KID
27903	SELECTIVE IG DEFIC NEC	40413	BEN HYP HT/KID W HF/KID
27904	CONG HYPOGAMMAGLOBULINEM	40492	HYP HT/KID NOS W CHR KID
27905	IMMUNODEFIC W HYPER-IGM	40493	HYP HRT/KID NOS W HF/KID
27906	COMMON VARIABL IMMUNODEF	5793	INTEST POSTOP NONABSORB
27909	HUMORAL IMMUNITY DEF NEC	585	CHRONIC RENAL FAILURE
27910	IMMUNDEF T-CELL DEF NOS	5855	CHRON KIDNEY DIS STAGE V
27911	DIGEORGES SYNDROME	5856	END STAGE RENAL DISEASE
27912	WISKOTT-ALDRICH SYNDROME	9968	COMPLICATIONS OF TRANSPLANTED ORGAN
27913	NEZELOFS SYNDROME	99680	COMP ORGAN TRANSPLNT NOS
27919	DEFIC CELL IMMUNITY NOS	99681	COMPL KIDNEY TRANSPLANT
2792	COMBINED IMMUNITY DEFICIENCY	99682	COMPL LIVER TRANSPLANT
2793	UNSPECIFIED IMMUNITY DEFICIENCY	99683	COMPL HEART TRANSPLANT
2794	AUTOIMMUNE DISEASE, NOT ELSEWHERE CLASSIFIED	99684	COMPL LUNG TRANSPLANT
27941		99685	COMPL MARROW TRANSPLANT
27949		99686	COMPL PANCREAS TRANSPLNT
27950	GRAFT-VERSUS-HOST NOS	99687	COMP INTESTINE TRANSPLNT
27951	AC GRAFT-VERSUS-HOST DIS	99688	STEM CELL TRANSPLANT COMPLICATIONS
27952	CHRONC GRAFT-VS-HOST DIS	99689	COMP OTH ORGAN TRANSPLNT
27953	AC ON CHRN GRFT-VS-HOST	V420	KIDNEY REPLACED BY TRANSPLANT
2798	OTHER SPECIFIED DISORDERS INVOLVING THE IMMUNE MECHANISM	V421	HEART REPLACED BY TRANSPLANT
2799	UNSPECIFIED DISORDER OF IMMUNE MECHANISM	V426	LUNG REPLACED BY TRANSPLANT
28409	CONST APLASTC ANEMIA NEC	V427	LIVER REPLACED BY TRANSPLANT
2841	PANCYTOPENIA	V428	OTHER SPECIFIED ORGAN OR TISSUE
28411	ANTINEOPLASTIC CHEMOTHERAPY INDUCED PANCYTOPENIA	V4281	BONE MARROW SPECIFIED BY TRANSPLANT
28412	OTHER DRUG INDUCED PANCYTOPENIA	V4282	PERIPHERAL STEM CELLS REPLACED BY TRANSPLANT
28419	OTHER PANCYTOPENIA	V4283	PANCREAS REPLACED BY TRANSPLANT
2880	AGRANULOCYTOSIS	V4284	INTESTINES REPLACE BY TRANSPLANT
28800	NEUTROPENIA NOS	V4289	OTHER REPLACED BY TRANSPLANT
28801	CONGENITAL NEUTROPENIA	V451	RENAL DIALYSIS STATUS
28802	CYCLIC NEUTROPENIA	V4511	RENAL DIALYSIS STATUS
28803	DRUG INDUCED NEUTROPENIA	V560	RENAL DIALYSIS ENCOUNTER
28809	NEUTROPENIA NEC	V561	FT/ADJ XTRCORP DIAL CATH
2881	FUNCTION DIS NEUTROPHILS	V562	FIT/ADJ PERIT DIAL CATH

ICD-9-CM Immunocompromised state procedure codes:

0018	INFUS IMMUNOSUP ANTIBODY	4105	ALLO HEM STEM CT W/O PUR
335	LUNG TRANSPLANT	4106	CORD BLD STEM CELL TRANS
3350	LUNG TRANSPLANT NOS	4107	AUTO HEM STEM CT W PURG
3351	UNILAT LUNG TRANSPLANT	4108	ALLO HEM STEM CT W PURG
3352	BILAT LUNG TRANSPLANT	4109	AUTO BONE MT W PURGING
336	COMBINED HEART-LUNG TRANSPLANTATION	5051	AUXILIARY LIVER TRANSPL
375	HEART TRANSPLANTATION	5059	LIVER TRANSPLANT NEC
3751	HEART TRANSPLANTATION	5280	PANCREATIC TRANSPLANT, NOS
410	OPERATIONS ON BONE MAROW AND SPLEEN	5281	REIMPLANTATION OF PANCREATIC TISSUE
4100	BONE MARROW TRNSPLNT NOS	5282	REIMPLANTATION OF PANCREATIC TISSUE
4101	AUTO BONE MT W/O PURG	5283	HETEROTRANSPLANT OF PANCREAS
4102	ALO BONE MARROW TRNSPLNT	5285	ALLOTRANSPLANTATION OF CELLS OF ISLETS OF LNGERHANS
4103	ALLOGRFT BONE MARROW NOS	5286	TRANSPLANTATION OF CELLS OF ISLETS OF LANGERHANS, NOS
4104	AUTO HEM STEM CT W/O PUR	5569	OTHER KIDNEY TRANSPLANTATION

Appendix D – Definitions of Neonate, Newborn, Normal Newborn, and Outborn

A neonate is defined as any discharge with either:
- age in days at admission between zero and 28 days (inclusive); or
- age in days missing and age in years equal to zero and either:
  - an admission type of newborn (SID ATYPE=4); or
  - with any-listed ICD-9-CM diagnosis codes for in-hospital live birth; or
  - with any-listed ICD-9-CM diagnosis codes for neonatal observation and evaluation

ICD-9-CM In-hospital live birth diagnosis codes:

V3000	SINGLE LB IN-HOSP W/O CS	V3401	OTH MULT LB-IN HOSP W CS
V3001	SINGLE LB IN-HOSP W CS	V3500	OTH MULT SB-HOSP W/O CS
V3100	TWIN-MATE LB-HOSP W/O CS	V3501	OTH MULT SB-IN HOSP W CS
V3101	TWIN-MATE LB-IN HOS W CS	V3600	MULT LB/SB-IN HOS W/O CS
V3200	TWIN-MATE SB-HOSP W/O CS	V3601	MULT LB/SB-IN HOSP W CS
V3201	TWIN-MATE SB-HOSP W CS	V3700	MULT BRTH NOS-HOS W/O CS
V3300	TWIN-NOS-IN HOSP W/O CS	V3701	MULT BIRTH NOS-HOSP W CS
V3301	TWIN-NOS-IN HOSP W CS	V3900	LIVEBORN NOS-HOSP W/O CS
V3400	OTH MULT LB-HOSP W/O CS	V3901	LIVEBORN NOS-HOSP W CS

ICD-9-CM Neonatal observation and evaluation diagnosis codes:

V290	OBSERVATIONS FOR SUSPECTED INFECTIOUS CONDITION	V293	OBSERVATIONS FOR SUSPECTED GENETIC OR METABOLIC CONDITION
V291	OBSERVATIONS FOR SUSPECTED NEUROLOGICAL CONDITION	V298	OBSERVATIONS FOR OTHER SPECIFIED SUSPECTED CONDITION
V292	OBSERVATIONS FOR SUSPECTED RESPIRATORY CONDITION	V299	OBSERVATIONS FOR UNSPECIFIED SUSPECTED CONDITION

A newborn is defined as any discharge meeting the definition of "neonate" (see above) with either:
- any-listed ICD-9-CM code for in-hospital live birth (see above) and age in days equal to zero or missing; or
- an admission type of newborn (SID ATYPE=4) and age in days equal to zero without any-listed ICD-9-CM diagnosis codes for out-of-hospital live birth; or
- an admission type of newborn (SID ATYPE=4) with point of origin for born inside this hospital (POINTOFORIGINUB04 code =5)

ICD-9-CM Out-of-hospital live birth diagnosis codes:

V301	SINGL LIVEBRN-BEFORE ADM	V342	OTH MULTIPLE NB-NONHOSP
V302	SINGLE LIVEBORN-NONHOSP	V351	OTH MULT SB-BEFORE ADM
V311	TWIN, MATE LB-BEFORE ADM	V352	OTH MULTIPLE SB-NONHOSP
V312	TWIN, MATE LB-NONHOSP	V361	MULT NB/SB-BEFORE ADM
V321	TWIN, MATE SB-BEFORE ADM	V362	MULTIPLE NB/SB-NONHOSP
V322	TWIN, MATE SB-NONHOSP	V371	MULT BRTH NOS-BEFORE ADM
V331	TWIN NOS-BEFORE ADMISSN	V372	MULT BIRTH NOS-NONHOSP
V332	TWIN NOS-NONHOSP	V391	LIVEBORN NOS-BEFORE ADM
V341	OTH MULT NB-BEFORE ADM	V392	LIVEBORN NOS-NONHOSP

A normal newborn is defined as any discharge meeting the definition of "newborn" (see above) with a DRG code of 391 or a MS-DRG code 795.

An outborn is defined as any discharge meeting the definition of "neonate" (see above) that does not meet the definition of "newborn" (see above) with either:

- age in days less than 2 days and not missing; or
- an admission type of newborn (SID ATYPE=4) and age in days missing; or
- an admission type of newborn (SID ATYPE=4) and point of origin for born outside this hospital (POINTOFORIGINUB04 code =6)