

**Agency for Healthcare Research and Quality
Patient Safety Indicators (PSI)**

ICD-9-CM and DRG Coding Updates to Version 4.2

September, 2010

The following changes were implemented in version 4.2 of the Patient Safety Indicator (PSI) software code (both SAS and Windows) and reflect changes to indicator definitions based on updates to ICD-9-CM and DRG codes for Fiscal Year 2010 (effective 10-1-2009). All changes noted below have been incorporated into the software syntax, software documentation and the *Patient Safety Indicators Technical Specifications*. With this software update, the PSI software definitions now incorporate ICD-9-CM codes valid from October 1, 1994 through September 30, 2010.

Indicator Name (#)	Component	Change
<u>PSI #2 – Death in Low Mortality DRGs</u>	Add diagnosis codes to denominator exclusion for cancer	Add code: 209.30 Malignant poorly differentiated neuroendocrine carcinoma, any site 209.31 Merkel cell carcinoma of the face 209.32 Merkel cell carcinoma of the scalp and neck 209.33 Merkel cell carcinoma of the upper limb 209.34 Merkel cell carcinoma of the lower limb 209.35 Merkel cell carcinoma of the trunk 209.36 Merkel cell carcinoma of other sites 209.70 Secondary neuroendocrine tumor, unspecified site 209.71 Secondary neuroendocrine tumor of distant lymph nodes 209.72 Secondary neuroendocrine tumor of liver 209.73 Secondary neuroendocrine tumor of bone 209.74 Secondary neuroendocrine tumor of peritoneum 209.75 Secondary Merkel cell carcinoma 209.79 Secondary neuroendocrine tumor of other sites V10.90 Personal history of unspecified malignant neoplasm V10.91 Personal history of malignant neuroendocrine tumor
<u>PSI #2 – Death in Low Mortality DRGs</u>	Add diagnosis codes to denominator exclusion for immunocompromised	279.41 Autoimmune lymphoproliferative syndrome ALPS 279.49 Autoimmune disease, not elsewhere classified
<u>PSI #2 – Death in Low Mortality DRGs</u>	Add diagnosis codes to denominator exclusion for trauma	813.46 Torus fracture of ulna 816.47 Torus fracture of radius and ulna

Indicator Name (#)	Component	Change
<u>PSI #8 – Post-operative Hip Fracture</u>	Add diagnosis codes to denominator exclusion for Metastatic cancer	209.70 Secondary neuroendocrine tumor, unspecified site 209.71 Secondary neuroendocrine tumor of distant lymph nodes 209.72 Secondary neuroendocrine tumor of liver 209.73 Secondary neuroendocrine tumor of bone 209.74 Secondary neuroendocrine tumor of peritoneum 209.75 Secondary Merkel cell carcinoma 209.79 Secondary neuroendocrine tumor of other sites
<u>PSI #11 – Post-operative Respiratory Failure</u>	Add diagnosis codes to denominator exclusion for neuromuscular disorders	359.71 Inclusion body myositis IBM 359.79 Other inflammatory and immune myopathies, NEC
<u>PSI #04 – Death Among Surgical Inpatients with Serious Treatable Complications</u>	Add diagnosis codes to denominator exclusion for viral pneumonia	488.0 Influenza due to identified avian influenza virus 488.1 Influenza due to identified novel H1N1 influenza virus
<u>PSI #04 – Death Among Surgical Inpatients with Serious Treatable Complications</u>	Change diagnosis code titles for denominator inclusion for renal failure	Modify codes: 584.5 Acute kidney failure, tubr necr 584.6 Acute kidney failure, cort necr 584.7 Acute kidney failure, medu necr 584.8 Acute kidney failure NEC 584.9 Acute kidney failure NOS
<u>PSI #04 – Death Among Surgical Inpatients with Serious Treatable Complications</u>	Change diagnosis code titles for denominator exclusion for infection	Modify codes: 670.00 Major puerperal infection, unspecified 670.02 Major puerperal infection, NOS-del p/p 670.04 Major puerperal infection NOS-p/p

Indicator Name (#)	Component	Change
<u>PSI #04 – Death Among Surgical Inpatients with Serious Treatable Complications</u>	Add diagnosis codes to denominator exclusion for infection	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
<u>PSI #10 – Post-operative Physiologic and Metabolic Derangements</u>	Change diagnosis code titles for denominator inclusion for PO physiological derangement	Modify codes: 584.5 Acute kidney failure, tubr necr 584.6 Acute kidney failure, cort necr 584.7 Acute kidney failure, medu necr 584.8 Acute kidney failure NEC 584.9 Acute kidney failure NOS
<u>PSI #03 – Pressure Ulcer</u>	Add diagnosis codes for denominator exclusion for hemiplegia, paraplegia, or quadriplegia	768.70 Hypoxic-ischemic encephalopathy, unspecified 768.72 Moderate hypoxic-ischemic encephalopathy 768.73 Severe hypoxic-ischemic encephalopathy
<u>PSI #8 – Post-operative Hip Fracture</u>	Add diagnosis codes for denominator exclusion for poisoning	969.00 Poisoning by antidepressant, unspecified 969.01 Poisoning by MAOI 969.02 Poisoning by SSNRI 969.03 Poisoning by SSRI 969.04 Poisoning by tetracyclics 969.05 Poisoning by tricyclics 969.09 Poisoning by other antidepressants 969.70 Poisoning by psychostimulant, unspec 969.71 Poisoning by caffeine 969.72 Poisoning by amphetamines/methaamph 969.73 Poisoning by methylphenidate 969.79 Poisoning by other psychostimulants
<u>Multiple PSI Indicators</u>	MS-DRG	Add: 265 Acid lead procedures

Indicator Name (#)	Component	Change
<u>Multiple PSI Indicators</u>	Comorbidity Changes	¹ 416.2 Chronic pulmonary embolism ¹ 768.70 Hypoxic-ischemic encephalopathy, unspecified ¹ 768.71 Mild hypoxic-ischemic encephalopathy ¹ 768.72 Moderate hypoxic-ischemic encephalopathy ¹ 768.73 Severe hypoxic-ischemic encephalopathy ¹ 209.70 Secondary neuroendocrine tumor, unspecified site ¹ 209.71 Secondary neuroendocrine tumor of distant lymph nodes ¹ 209.72 Secondary neuroendocrine tumor of liver ¹ 209.73 Secondary neuroendocrine tumor of bone ¹ 209.74 Secondary neuroendocrine tumor of peritoneum ¹ 209.75 Merkel cell carcinoma, unknown primary site ¹ 209.79 Secondary neuroendocrine tumor of other sites ¹ 209.31 Merkel carcinoma of the face ¹ 209.32 Merkel cell carcinoma of the scalp and neck ¹ 209.33 Merkel cell carcinoma of the upper limb ¹ 209.34 Merkel cell carcinoma of the lower limb ¹ 209.35 Merkel cell carcinoma of the trunk ¹ 209.36 Merkel cell carcinoma of other sites

¹ ICD-9-CM changes are new ICD-9-CM codes introduced in FY2010

Indicator Name (#)	Component	Change
<p><u>Multiple PSI Indicators</u></p>	<p>Add new operating procedure codes</p>	<p>1751 Implant CCM, total system 1752 Implant CCM pulse genr 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: 9227 RADIOACTIVE ELEM IMPLANT 3760 Imp Bivn Ext Hrt Ast Sys 4840 Pull-thru Res Rectum NOS 3768 PERCUTAN HRT ASSIST SYST</p>
<p><u>Multiple PSI Indicators</u></p>	<p>Remove operating procedure codes</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 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</p>