
Summary of Clinical Logic Updates for PPCs

THE FOLLOWING UPDATES have been made to the clinical logic for 3M™ Potentially Preventable Complications (PPC) Classification System v29.0, based on the following:

- ◆ Input from the clinical review of stakeholders, feedback resulting from use in the Maryland healthcare payment system, and comments from other users of the PPC Classification System.
- ◆ Logic and code changes related to v29.0 ICD-9-CM diagnosis and procedure code updates.
- ◆ Updated normative data.

ICD-9-CM Diagnosis and Procedure Code Updates:

New and expanded diagnosis and procedure codes were clinically reviewed for appropriate inclusion or replacement of codes in the PPC logic and code lists.

Refer to the Microsoft® Excel® file attached to this pdf for a list of the code updates. If you can't see the file attachment, refer to the online help for your version of Adobe® Acrobat® for instructions on accessing file attachments.

Major Surgical DRG and Major OR Procedure Update

Added APR DRG 513 (Uterine & Adnexa Procs for Non-Malig) and its associated procedures to the Major Surgical DRGs and Major OR Procedures.

Multiple PPC Assignment for Single Condition:

Added hierarchy logic (table P-2 in appendix P) to address situations where an admission may meet the criteria for multiple PPCs that actually represent a single condition. This is due to coding of both the general condition (e.g. post-op infection) and the specific condition (e.g. cellulitis). In such cases the PPC logic precludes assignment of the general or less significant PPC.

PPC Assigned	PPC Hierarchically Excluded
06 - Aspiration Pneumonia	05 - Pneumonia & Other Lung Infections
06 - Aspiration Pneumonia	08 - Other Pulmonary Complications
06 - Aspiration Pneumonia	48 - Other Complications of Medical Care
03 - Acute Pulmonary Edema and Respiratory Failure without Ventilation	05 - Pneumonia & Other Lung Infections
03 - Acute Pulmonary Edema and Respiratory Failure without Ventilation	06 - Aspiration Pneumonia
03 - Acute Pulmonary Edema and Respiratory Failure without Ventilation	08 - Other Pulmonary Complications
04 - Acute Pulmonary Edema and Respiratory Failure with Ventilation	06 - Aspiration Pneumonia
04 - Acute Pulmonary Edema and Respiratory Failure with Ventilation	08 - Other Pulmonary Complications
07 - Pulmonary Embolism	08 - Other Pulmonary Complications
07 - Pulmonary Embolism	16 - Venous Thrombosis
38 - Post-Operative Wound Infection & Deep Wound Disruption with Procedure	33 - Cellulitis
38 - Post-Operative Wound Infection & Deep Wound Disruption with Procedure	44 - Other Surgical Complication - Moderate
53 - Infection, Inflammation and Clotting Complications of Peripheral Vascular Catheters and Infusions	33 - Cellulitis
53 - Infection, Inflammation and Clotting Complications of Peripheral Vascular Catheters and Infusions	44 - Other Surgical Complication - Moderate
53 - Infection, Inflammation and Clotting Complications of Peripheral Vascular Catheters and Infusions	52 - Inflammation & Other Complications of Devices, Implants or Grafts except Vascular Infection
54 - Infections due to Central Venous Catheters	33 - Cellulitis
54 - Infections due to Central Venous Catheters	52 - Inflammation & Other Complications of Devices, Implants or Grafts except Vascular Infection
54 - Infections due to Central Venous Catheters	53 - Infection, Inflammation and Clotting Complications of Peripheral Vascular Catheters and Infusions
66 - Catheter-Related Urinary Tract Infection	65 - Urinary Tract Infection
35 - Septicemia & Severe Infections	65 - Urinary Tract Infection
35 - Septicemia & Severe Infections	66 - Catheter-Related Urinary Tract Infection
35 - Septicemia & Severe Infections	34 - Moderate Infections

PPC Assigned	PPC Hierarchically Excluded
35 - Septicemia & Severe Infections	37 - Post-Operative Infection & Deep Wound Disruption without Procedure
35 - Septicemia & Severe Infections	38 - Post-Operative Wound Infection & Deep Wound Disruption with Procedure
35 - Septicemia & Severe Infections	53 - Infection, Inflammation and Clotting Complications of Peripheral Vascular Catheters and Infusions
35 - Septicemia & Severe Infections	54 - Infections due to Central Venous Catheters
60 - Major Puerperal Infection and Other Major Obstetric Complications	35 - Septicemia & Severe Infections
60 - Major Puerperal Infection and Other Major Obstetric Complications	44 - Other Surgical Complication - Moderate
60 - Major Puerperal Infection and Other Major Obstetric Complications	54 - Infections due to Central Venous Catheters
42 - Accidental Puncture/Laceration during Invasive Procedure	40 - Post-Operative Hemorrhage & Hematoma without Hemorrhage Control Procedure or I&D Procedure
42 - Accidental Puncture/Laceration during Invasive Procedure	43 - Accidental Cut or Hemorrhage during Other Medical Care
42 - Accidental Puncture/Laceration during Invasive Procedure	44 - Other Surgical Complication - Moderate
41 - Post-Operative Hemorrhage & Hematoma with Hemorrhage Control Procedure or I&D Procedure	42 - Accidental Puncture/Laceration during Invasive Procedure
47 - Encephalopathy	36 - Acute Mental Health Changes
02 - Extreme CNS Complications	47 - Encephalopathy
52 - Inflammation & Other Complications of Devices, Implants or Grafts except Vascular Infection	44 - Other Surgical Complication - Moderate
52 - Inflammation & Other Complications of Devices, Implants or Grafts except Vascular Infection	50 - Mechanical Complication of Device, Implant & Graft
52 - Inflammation & Other Complications of Devices, Implants or Grafts except Vascular Infection	51 - Gastrointestinal Ostomy Complications
05 - Pneumonia & Other Lung Infections	08 - Other Pulmonary Complications
10 - Congestive Heart Failure	08 - Other Pulmonary Complications
14 - Ventricular Fibrillation/Cardiac Arrest	09 - Shock
14 - Ventricular Fibrillation/Cardiac Arrest	12 - Cardiac Arrhythmias & Conduction Disturbances
28 - In-Hospital Trauma and Fractures	64 - Other In-Hospital Adverse Events
37 - Post-Operative Infection & Deep Wound Disruption without Procedure	33 - Cellulitis
39 - Reopening Surgical Site	44 - Other Surgical Complication - Moderate
40 - Post-Operative Hemorrhage & Hematoma without Hemorrhage Control Procedure or I&D Procedure	44 - Other Surgical Complication - Moderate
45 - Post-procedure Foreign Bodies	44 - Other Surgical Complication - Moderate
45 - Post-procedure Foreign Bodies	46 - Post-Operative Substance Reaction & Non-O.R. Procedure for Foreign Body
49 - Iatrogenic Pneumothrax	44 - Other Surgical Complication - Moderate

PPC Assigned	PPC Hierarchically Excluded
50 - Mechanical Complication of Device, Implant & Graft	44 - Other Surgical Complication - Moderate
61 - Other Complications of Obstetrical Surgical & Perineal Wounds	33 - Cellulitis
61 - Other Complications of Obstetrical Surgical & Perineal Wounds	44 - Other Surgical Complication - Moderate
63 - Post-Operative Respiratory Failure with Tracheostomy	44 - Other Surgical Complication - Moderate

Exclusion Group Changes: PPC code exclusion group 26—Other Respiratory Diagnoses except Signs, Symptoms & Minor Diagnoses.

Codes were removed from this Exclusion Group for consistency. Code exclusion group 26 applies to PPC 8, Other Pulmonary Complications.

Code	Description
2142	Lipoma of the Intrathoracic Region
2311	Carcinoma in situ of Trachea
2312	Carcinoma in situ of Bronchus and lung
2318	Carcinoma in situ of Other specified parts of respiratory system
2319	Carcinoma in situ of Respiratory system, part unspecified

PPC Specific Logic Changes: PPC Specific Malignancy-Related Exclusions.

The following malignancy exclusions were added to specific PPCs to invoke the exclusion at the PPC level if it did not meet global malignancy exclusion criteria:

Description	Codes	PPC
Respiratory Malignancy	DRG 136	05 – Pneumonia & Other Lung Infections 06 – Aspiration Pneumonia 08 – Other Pulmonary Complications
Liver & Pancreas Malignancy	DRG 281	19 - Major Liver Complications
Leukemia & Lymphoma	MDC 17	34 – Moderate Infections 35 – Septicemia & Severe Infections 65 – Urinary Tract Infection 66 – Catheter Related Urinary Tract Infection

PPC 03 – Acute Pulmonary Edema and Respiratory Failure without Ventilation.

PPC assignment logic updated to prevent exclusion error when patient has mechanical vent on procedure day. PPC 03 will only be assigned if MV is performed on a non-surgical day.

PPC 31 – Decubitus Ulcer.

PPC logic updated to include the pediatric population and narrow the assignment criteria to the more severe stages. The MDC 15 Exclusion was removed. Stage I (70721), Stage II (70722), and Unspecified (70720) Decubitus Ulcers were removed from PPC assignment.

PPC 34 – Moderate Infections.

Removed Sdx code 2866 (defibrination syndrome) from PPC assignment because it is used to code multiple conditions not all of which are infections.

PPC 35 – Septicemia & Severe Infections.

PPC logic updated to include the pediatric patients in a surgical admission APR DRG excluding newborns (MDC 15). New exclusion groups were added for patients less than 18 years of age. The length of stay criteria for all patients was increased to three days.

PPC 45 – Post-Procedure Foreign Bodies.

Logic updated to add exclusion of all patients not in a surgical DRG or DRG 191 and 192. This results in the excluded patients being assigned a PPC status of 0 (PPC excluded, would not have been assigned) or 1 (PPC excluded, would have been assigned). Previously these patients were assigned a PPC status of 2 (not assigned, not excluded).

PPC 65 – Urinary Tract Infection.

Formerly PPC 22, this PPC was renumbered to be in sequence with the new PPC 66, Catheter-Related Urinary Tract infections. PPC 65 logic was updated to exclude patients less than 18 years of age (previously excluded only newborn patients in MDC 15). This PPC no longer includes catheter –related urinary tract infections (99664, React-indewll urin cath).

PPC 66 – Catheter-Related Urinary Tract Infection.

PPC 66 was created to include the pediatric population excluding newborns (MDC 15) in catheter-related urinary tract infections.

Updated PPC Norm Files

PPC norms were calculated from the State of California (OSHPD) Inpatient Discharge Dataset* from 2008 and 2009. The norm file contains norms data aggregated by Admission APR DRG and SOI for each PPC.

* Hospitals with poor POA reporting quality were excluded. Any patient record found to be suspect based on the criteria found in the PPC Grouping Software Installation and User's Guide was rejected prior to the system considering it for the PPC classification. Patient records with errors were not counted in the PPC rate calculations.