

Potentially Preventable Complications Measures

Encounters are flagged for the numerator and denominator of these measures by the 3M™ Potentially Preventable Complications (PPCs) Software and these flags are passed through to your Axiom Clinical Analytics environment. This page provides you a list of the current PPCs and a high-level view of the PPC assignment logic; all of this information comes directly from 3M.

Axiom Clinical Analytics Software licenses the grouping software for these measures from 3M and does not calculate these measures independently. This is an add-on feature to your Axiom Clinical Analytics contract; for more information about adding this functionality to your Axiom Clinical Analytics server, please [Contact Support](#).

For clients with a PPC license, you can view your PPC incidents in the following Scorecards sections:

- » [Potentially Preventable Complications Report \(PPCs\)](#)
- » [Clinical Case Summary](#)
- » [Details](#)

Current PPC List

The following table lists all of the current PPCs, including their grouping and level.

PPC Group

1. Extreme Complications
2. Cardiovascular-Respiratory Complications
3. Gastrointestinal Complications
4. Perioperative Complications
5. Infectious Complications
6. Malfunctions, Reactions, etc.
7. Obstetrical Complications
8. Other Medical and Surgical Complications

PPC Level

1. **Other:** Potentially serious complications that do not rise to the same level of clinical significance as major complications because they are not as consistently likely to pose a serious or sustained threat to health or to result in as great an increase in hospital resource use.
2. **Major:** Those complications that have the most consistent and significant impact on acute and chronic health and cause the largest increase in hospital resource use.
3. **Monitor:** Complications that can vary in their association with problems in quality of care, due to inconsistency in the application and interpretation of coding criteria from one hospital to another. This level contains just two PPCs - Renal failure without dialysis and Clostridium Difficile Colitis. Although these complications should not be used for definitive assessments of quality, they should be monitored to check for changes in occurrence.

PPC	Description	Group	Level
01	Stroke & Intracranial Hemorrhage	2	2
02	Extreme CNS Complications	1	2
03	Acute Pulmonary Edema and Respiratory Failure without Ventilation	2	2
04	Acute Pulmonary Edema and Respiratory Failure with Ventilation	1	2
05	Pneumonia & Other Lung Infections	2	2
06	Aspiration Pneumonia	2	2
07	Pulmonary Embolism	2	2
08	Other Pulmonary Complications	2	1
09	Shock	1	2
10	Congestive Heart Failure	2	2
11	Acute Myocardial Infarction	2	2
13	Other Acute Cardiac Complications	2	1
14	Ventricular Fibrillation/Cardiac Arrest	1	2
15	Peripheral Vascular Complications except Venous Thrombosis	2	2
16	Venous Thrombosis	2	2
17	Major Gastrointestinal Complications without Transfusion or Significant Bleeding	3	2
18	Major Gastrointestinal Complications with Transfusion or Significant Bleeding	3	2
19	Major Liver Complications	3	2
20	Other Gastrointestinal Complications without Transfusion or Significant Bleeding	3	1
21	Clostridium Difficile Colitis	5	3
23	Genitourinary Complications except Urinary Tract Infection	8	1
24	Renal Failure without Dialysis	8	3
25	Renal Failure with Dialysis	1	2
26	Diabetic Ketoacidosis & Coma	8	1
27	Post-Hemorrhagic & Other Acute Anemia with Transfusion	8	1

PPC	Description	Group	Level
28	In-Hospital Trauma and Fractures	8	1
29	Poisonings except from Anesthesia	6	1
30	Poisonings due to Anesthesia	6	1
31	Pressure Ulcer	8	2
32	Transfusion Incompatibility Reaction	6	1
33	Cellulitis	5	1
34	Moderate Infections	5	1
35	Septicemia & Severe Infections	5	2
36	Acute Mental Health Changes	8	1
37	Post-Procedural Infection & Deep Wound Disruption without Procedure	4	1
38	Post-Procedural Infection & Deep Wound Disruption with Procedure	4	2
39	Reopening Surgical Site	4	2
40	Peri-Operative Hemorrhage & Hematoma without Hemorrhage Control Procedure or I&D Procedure	4	1
41	Peri-Operative Hemorrhage & Hematoma with Hemorrhage Control Procedure or I&D Procedure	4	2
42	Accidental Puncture/Laceration during Invasive Procedure	4	2
44	Other Surgical Complication - Moderate	8	1
45	Post-Procedural Foreign Bodies and Substance Reaction	4	2
47	Encephalopathy	8	2
48	Other Complications of Medical Care	8	1
49	Iatrogenic Pneumothorax	6	2
50	Mechanical Complication of Device, Implant & Graft	6	1
51	Gastrointestinal Ostomy Complications	6	1
52	Infection, Inflammation & Other Complications of Devices, Implants or Grafts except Vascular Infection	6	1
53	Infection, Inflammation and Clotting Complications of Peripheral Vascular Catheters and Infusions	6	1

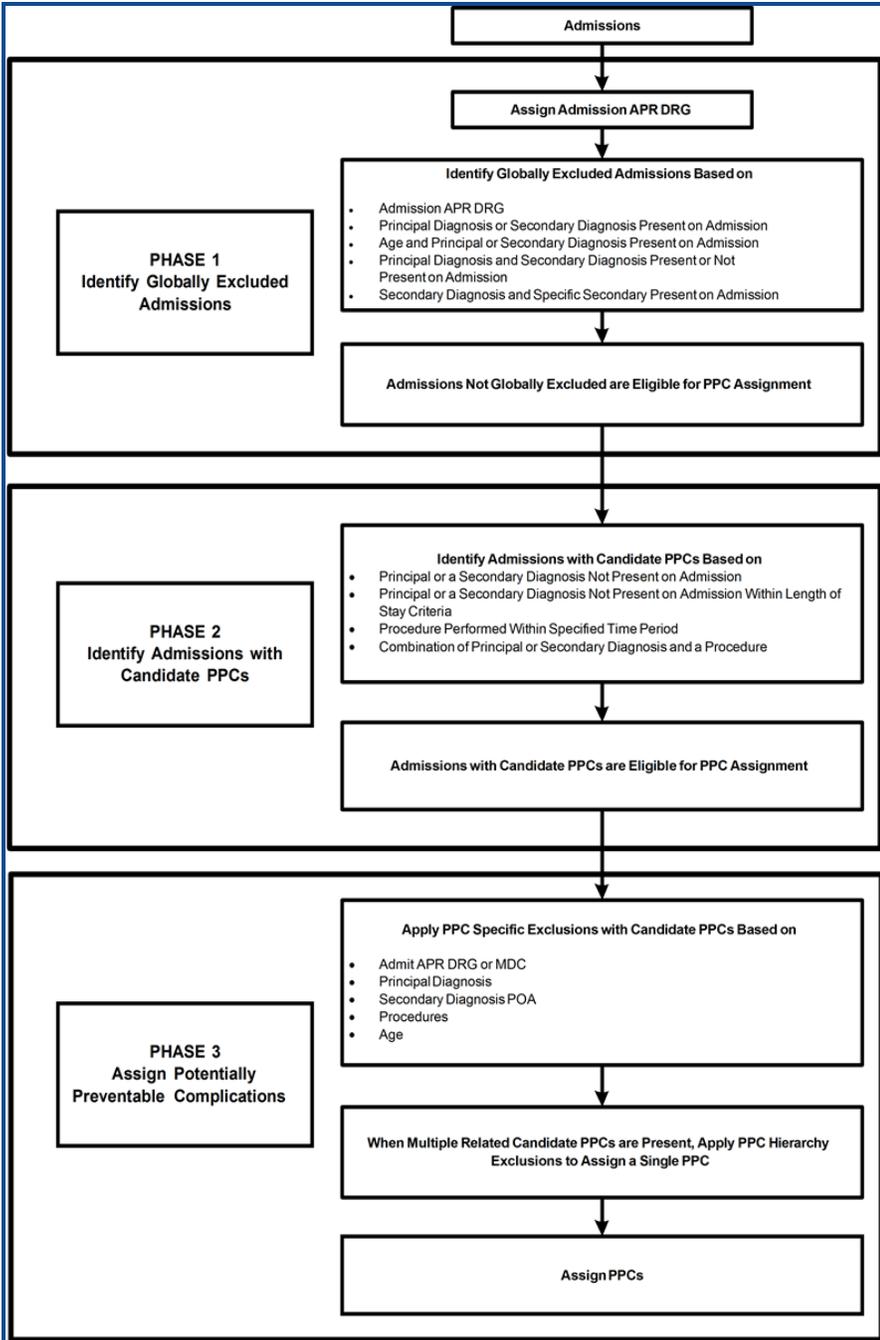
PPC	Description	Group	Level
54	Central Venous Catheter-Related Blood Stream Infection	6	2
59	Medical & Anesthesia Obstetric Complications	7	1
60	Major Puerperal Infection and Other Major Obstetric Complications	7	2
61	Other Complications of Obstetrical Surgical & Perineal Wounds	7	1
63	Post-Procedural Respiratory Failure with Tracheostomy	1	2
64	Other In-Hospital Adverse Events	8	1
65	Urinary Tract Infection	5	1
66	Catheter-Related Urinary Tract Infection	5	1

Overview of PPC Logic

This section provides an overview of the PPC logic. The logic is divided into three phases:

1. Identify globally-excluded admissions
2. Identify admissions with candidate complications
3. Assign PPCs after applying PPC exclusions and hierarchy exclusions

The following figure is a graphical representation of the three-phase PPC logic.



Benchmarks

Similar to other measures, PPCs are benchmarked using APR-DRG. However, the encounter-level APR-DRG that is used for comparison is not the APR-DRG of the encounter, but the PPC-Adjusted APR-DRG, which is the APR-DRG to which the encounter would have been assigned, had the patient not experienced the complication. Note that there are not MS-DRG benchmarks for these measures, as the 3M logic includes only the PPC-Adjusted APR-DRG for each encounter and not a PPC-Adjusted MS-DRG.