

3M Potentially Preventable Complications

ICD-9 to ICD-10



PPC Grouper Versions

- The transition to ICD-10 is required for everyone covered by the Health Insurance Portability and Accountability Act (HIPAA). Version 33.0 will be the official HIPAA compliant ICD-10 version of the 3M PPC Software. The first two versions (v31.0 and v32.0) each include an ICD-9 version and an ICD-10 version. Those ICD-10 versions are considered preliminary and not HIPAA-compliant and were intended for usability testing and impact analysis only. PPC v33.0 will only be produced in ICD-10.
- Replication Goal: The clinical logic in the two PPC versions (ICD-9 and ICD-10) will be essentially the same. Grouping results in each ICD-10 version will replicate the ICD-9 version—that is, claims coded with ICD-10 and grouped with the ICD-10 version of the grouper will have the same PPC assigned as the same claim coded with ICD-9 and grouped with the ICD-9 version of the grouper.

Code Mapping

■ Available Mapping

Standard code mapping utilized by the PPC grouper allows ICD-9-CM codes to be forward and backward mapped between ICD-9-CM versions:

- Standard code mapping (ICD-10 v33 backward to ICD-9 v32).
- During the one year transition period, Oct 1 2015-Sept 30, 2016, additional backward code mapping will be available from ICD-10 v33.0 to ICD-10 v32.0.
- Ongoing: Mapping between new versions of ICD-10 and ICD-10 v33.0 along with the legacy ICD-9 forward and backward code mapping.

■ Code/Grouper Versions

The PPC grouper expects the patient records it is processing to contain diagnosis and procedure codes that match the version of the grouper.

- For example, to use the PPC v.32 grouper on records that contain ICD-9-CM v.31 codes, you tell the software to map the v.31 codes on your patient records to the ICD-9-CM v.32 codes that the PPC v.32 grouper uses.
- In future versions for example, to use PPC v.33 on records that contain ICD-10-CM v.34 codes, you tell the software to map the v.34 codes to the ICD-10-CM v.33 codes that the PPC v.33 grouper uses.

Introduction of PPC ICD-9/ICD-10 Replication

51

Clinical concepts translated directly or simply expanded in specificity

PPCs 1-37, 44-54, 63-66

13

Clinical definition remains valid for ongoing use though some coding concepts changed that could affect assignment rates. Suggest extra consideration in rate comparisons during the transition year.

PPCs 38-42, 55-62 (OB)

1

Clinical concepts not replicated in ICD-10 or combined with an existing concept.

PPC 43

PPC Specific ICD-10 Replication Impacts

For the majority of PPCs, replication in the ICD-10 coding system was straightforward.

A couple of examples.....

PPC 55—Obstetrical Hemorrhage without Transfusion

Example of a 1:1 code match between ICD-9 and ICD-10

- PPC 55 is an example where there was a direct code-to-code translation with the same meaning.
- PPC 55 Volume
 - Based on CA dataset used for v.32 norms (2010-2011, approx. 5 MM records)
 - PPC assignment count: 17,458
 - PPC Assignment Rate: 2.06%

PPC 55—Obstetrical Hemorrhage without Transfusion

Examples

ICD-9

Either of the following diagnoses must be either principal or secondary diagnoses and can be either be POA or NPOA:

- 66112 Postpartum hemorrhage NEC – delivered with mention of postpartum complication
- 66622 Delayed and secondary postpartum hemorrhage, delivered with mention of postpartum complication

ICD-10

- O721 Other immediate postpartum hemorrhage
- O722 Delayed and secondary postpartum hemorrhage

PPC 35—Septicemia & Severe Infections

Example of a match between ICD-9 and ICD-10 with increased specificity

- PPC 35 is an example where the same code structure exists with some increase in code specificity related to the type of infection or infectious agent. The number of codes in the assignment criteria have increased but the clinical and conceptual definition match in the same manner.

For example, in ICD-10, there are:

- Separate ICD-10 codes for bacteria groupings (e.g. Group A Streptococcus, Group B Streptococcus)
- PPC 35 Volume
 - Based on CA dataset used for v.32 norms (2010-2011, approx. 5 MM records)
 - PPC assignment count: 16,356
 - PPC Assignment Rate: 0.37%

PPC 35—Septicemia & Severe Infections

Examples

ICD-9

One or more of the following secondary diagnoses is coded, but not present on admission and length of stay is greater than 3 days:

- 0386 Streptococcal septicemia

ICD-10

- A400 Sepsis due to streptococcus, group A
- A401 Sepsis due to streptococcus, group B
- A403 Sepsis due to streptococcus pneumonia

PPC 1 – Stroke & Intracranial Hemorrhage

- In PPC 1, the ICD-10 diagnosis codes continue to indicate non-traumatic cerebral hemorrhage or infarction and the only change in ICD-10 is that the coding now allows for increased specification of the site (e.g. vessel) and the cause of the infarction (e.g. thrombosis or embolism).

Example: I63032 Cerebral infarction due to thrombosis of left carotid artery

- The number of codes in the assignment criteria and exclusion groups have increased but the clinical and conceptual definition match.
- PPC 1 Volume
 - Based on CA dataset used for v.32 norms (2010-2011, approx. 5 MM records)
 - PPC assignment count: 6,760
 - PPC Assignment Rate: 0.15%

PPC 1 – Stroke & Intracranial Hemorrhage

Examples

ICD-9

One or more of the following secondary diagnoses is coded, but not present on admission:

- 430 Subarachnoid hemorrhage

ICD-10

- I6010 Nontraumatic subarachnoid hemorrhage from unspecified middle cerebral artery
- 16011 Nontraumatic subarachnoid hemorrhage from right middle cerebral artery
- 16012 Nontraumatic subarachnoid hemorrhage from left middle cerebral artery
- Total of 20 Nontraumatic subarachnoid hemorrhage vessels and location codes.

PPC ICD-10 Replication Challenges

- Where ICD-9 PPC assignment definitions were unable to be replicated, the clinical concept of the PPC was defined using the increased specificity and precision of the ICD-10 coding system to match the ICD-9 clinical concept as closely as possible.
- While the definition of the ICD-10 PPC is clinically enhanced by the specificity of the ICD-10 Coding System, the coding concepts are different and may result in different assignment rates. The clinical definition of the PPC remains valid for ongoing use in the ICD-10 Coding System, however extra consideration will be required for rate comparisons during the transition year.
- The Maryland HSCRC will monitor the impact of the transition and determine appropriate actions to manage the transition year comparison rates and policy implications.

Specific Areas of Replication Challenges

Some definitional changes presented challenges to replication in ICD-10:

- A broad clinical concept represented by a single code in ICD-9 was significantly expanded or redefined for increased specification, clarity, and consistency in ICD-10 (e.g. laceration, hemorrhage, etc.).
- A concept present in the ICD-9 coding system is no longer present in the ICD-10 coding system (e.g. reopen, reclose), but there are other codes and rules that can clinically specify the concept.
- The clinical structure of the code category was significantly revised or redefined (e.g. The episode of care was redefined in the OB Chapter) thus leading to greater precision of the PPC.

Examples....

PPC 38: Post-Procedural Wound Infection & Disruption w Procedure

- ICD-10 PCS codes generally specify the procedure, the body system and part, and the approach. For example: 0D9W0ZZ - Drainage of peritoneum, open approach.

- ICD-9 concepts like “reclose” or “reopen” had to be replicated using the ICD-10 procedure codes in combination with the procedure date, interval timing, and other criteria:
 1. PPC 38 assignment is no longer based on a single procedure of “reclose post op disruption” because that code does not exist in ICD-10.
 2. The translation of the diagnoses was straightforward and represents post-procedure wound infection and deep wound disruption in ICD-10.
 3. ICD-10 procedures with timing criteria that indicate the exploration or treatment of a possible disruption or infection are used in place of the reopen, reclose, and other non-specific procedures (e.g. laparotomy).

PPC 38: Post-Procedural Wound Infection & Disruption w Procedure

Examples

ICD-9

Either diagnosis NPOA and LOS >2 days:

- 99831 Disruption of internal operation wound
- 99859 Other postop infection

AND

Procedure performed >1 day after the abdominal procedure:

- 5492 Remove foreign body from peritoneum

ICD-10

Diagnosis examples:

- K6811 Post procedure retroperitoneal abscess
- T8132XA Disruption of internal surgical wound
- T814XXA Infection following a procedure

AND

Procedure examples:

- 0DCW0ZZ Extirpation of matter from peritoneum, open approach
- 0DCW3ZZ Extirpation of matter from peritoneum, percutaneous approach
- 0DCW4ZZ Extirpation of matter from peritoneum, percutaneous endoscopic approach

PPC 39: Reopen Surgical Site

- In ICD-9, the PPC 39 logic also used procedures that represented a “reopening.”
- In ICD-10, the more precise procedure codes are used to specify the type of procedure (drainage, excision, inspection, extirpation, revision, and repair) and specific body part. PPC defined sequence/timing interval is applied to determine if the procedure was performed following the original procedure and represents a “reopening.”

PPC 39: Reopen Surgical Site

Examples

ICD-9

The following procedure is performed one or more days after the abdominal procedure is performed (see App. N):

- 5419 Laparotomy
- 5411 Exploratory laparotomy

And the patient is in the Abdominal region surgical admission APR DRGs (see App. M)

ICD-10

Example procedures:

- 0D9W00Z, Drainage of peritoneum with drainage device, open approach
- 0WCP0ZZ, Extirpation of matter from GI tract, open approach

PPC 40 and 41: Peri-Operative Hemorrhage & Hematoma w/wo Hemorrhage Control Procedure or I&D Procedure

- In ICD-9, the assignment of this PPC was based on a diagnoses of hemorrhage (99811) or hematoma (99812) complicating a procedure and a general hemorrhage control procedure, 3998. In addition, APR DRG groups with some body part specific procedures were formed to identify hemorrhage following a procedure in more specific body sites (abdominal, respiratory, etc).
- In ICD-10, the diagnoses and control procedures related to hemorrhage and hematoma are:
 1. Combined into a single concept of hemorrhage/hematoma,
 2. Distinguished as an intraoperative or post-procedural, and
 3. Expanded to include the specific anatomical region or body system
- The APR DRG criteria is no longer required to identify the location of the hemorrhage.

PPC 40 and 41: Peri-Operative Hemorrhage & Hematoma w/w/o Hemorrhage Control Procedure or I&D Procedure

Examples

ICD-9

The following secondary diagnosis is coded but not present on admission:

- 99811 Hemorrhage complicating procedure

And the following procedure is performed the same day or after the principal procedure is performed:

- 3998 Hemorrhage control NOS

ICD-10

Example of hemorrhage diagnosis:

- K91840 Postprocedural hemorrhage/hematoma of digestive system organ complicating digestive system procedure

Examples of hemorrhage control procedures:

- OW3P0ZZ Control bleeding in gastrointestinal tract, open approach
- OW3P3ZZ Control bleeding in gastrointestinal tract, percutaneous approach
- OW3P4ZZ Control bleeding in gastrointestinal tract, percutaneous endoscopic approach

PPC 42: Accidental Puncture/Laceration during Invasive Procedure

- In ICD-9, much like the previous examples, a single broad diagnosis code (e.g. accidental op laceration) was used to identify the occurrence of an accidental puncture or laceration complication. The ICD-9 PPC logic added other specific diagnoses, suture laceration procedures and APR DRG groupings help identify the affected body systems.
- In ICD-10, the diagnosis codes for accidental puncture or laceration during a procedure, surgery, or cardiac catheterization have been expanded to identify the affected body site and the type of procedure during which the procedure occurred. The suture laceration procedure codes (e.g. 4461, Suture gastric laceration) do not exist in ICD-10.
- The number of body sites represented in ICD-10 is much more comprehensive than in ICD-9 and they can be applied to OR, NOR, and other procedures. Because of the improved precision of the diagnosis codes, APR DRG groups are no longer necessary to identify the body site.

PPC 42 Accidental Puncture/Laceration during Invasive Procedure

Examples

ICD-9

PPC is assigned for patients in surgical APR DRGs

Either of the following secondary diagnoses is coded but not present on admission:

- 9982 Accidental laceration during a procedure

AND

One or more of the following procedures is performed the same day or after the principal procedure is performed:

- 4461 Suture gastric laceration

ICD-10

PPC is assigned for patients in all APR DRGs

Diagnosis example:

- K9171 Accidental puncture and laceration of a digestive system organ during digestive procedure

Procedures:

The procedures used in the PPC 42 ICD-9 assignment criteria to specifically indicate suture of a laceration do not exist in ICD-10.

PPC 43: Accidental Cut or Hemorrhage during Other Medical Care

- In ICD-9, the concepts represented by the E-codes in PPC 43 do not exist in ICD-10. As a result, there are no equivalent single code translations for the PPC 43 ICD-9 codes.
- In ICD-10, PPC 43 has been eliminated and the accidental cuts during medical procedures will be captured in PPC 42.
- When computing rates from I9 data and applying to ICD-10 data, combine 42 and 43 in I9 in order to compare to the ICD-10 rate.

OB-Related PPCs (55-62)

- There were major modifications made to the OB code section in the ICD-10 coding system:
- The episode of care (delivered, antepartum, postpartum) is no longer a secondary axis of classification for obstetric codes. Instead, the majority of codes now have a final character identifying the trimester of pregnancy in which the condition occurred or specify that the condition occurred during delivery.
- The improved precision of the timing of the condition in ICD-10 allowed for some simplification in the diagnosis POA requirements in the PPC assignment criteria. An ICD-10 diagnosis can now identify a condition as occurring during labor and delivery or complicating childbirth rather than depending on the POA status of the less specific ICD-9 diagnosis.

PPC 59: Medical & Anesthesia Obstetric Complications

Examples

ICD-9

Diagnosis either principal or secondary and either present on admission or not present on admission:

- 66802 Pulmonary complication, delivered with postpartum complication

OR

Secondary diagnosis , not present on admission:

- 66801 Pulmonary complication, delivered with or without mention of antepartum condition

ICD-10

Diagnosis either principal or secondary and either present on admission or not present on admission:

- O740 Aspiration pneumonitis due to anesthesia during labor and delivery
- O741 Other pulmonary complication due to anesthesia during labor and delivery
- O742 Cardiac complications of anesthesia during labor and delivery

Summary of PPC ICD-9/ICD-10 Replication

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PPC 43



Questions?