



Summary of March 2009 ICD-9-CM Coordination and Maintenance Committee Meeting

The ICD-9-CM Coordination and Maintenance (C&M) Committee, cosponsored by the National Center for Health Statistics (NCHS) and the Centers for Medicare and Medicaid Services (CMS), met on March 11-12, 2009 in Baltimore, MD. Donna Pickett, RHIA, from NCHS, and Patricia Brooks, RHIA, from CMS, cochaired the meeting.

Proposed modifications to ICD-9-CM were presented and are summarized below. This summary does not include all of the details of the code proposals or all of the recommendations made at the meeting. For complete details, review the minutes and code proposals posted on the CMS and NCHS websites. Diagnosis code proposals and the minutes from the diagnosis portion of the meeting are posted on the NCHS website and can be accessed at the following link:

www.cdc.gov/nchs/about/otheract/icd9/maint/maint.htm. Procedure code proposals and the minutes from the procedure portion of the meeting can be found at the CMS website and can be accessed at the following link:

http://www.cms.hhs.gov/ICD9ProviderDiagnosticCodes/03_meetings.asp.

Suggestions for procedure code proposals to be considered at a future Coordination and Maintenance Committee, as well as comments on procedure proposals presented at the September meeting, may be emailed to Pat Brooks at Patricia.brooks2@cms.hhs.gov or mailed to: Centers for Medicare & Medicaid Services, CMM, HAPG, Division of Acute Care, Mail Stop C4-08-06, 7500 Security Boulevard, Baltimore, Maryland 21244-1850.

Suggestions for diagnosis code proposals for consideration at a future Coordination and Maintenance Committee, as well as comments on diagnosis proposals presented at the September meeting, may be emailed to Donna Pickett at dfp4@cdc.gov or mailed to: Donna Pickett, National Center for Health Statistics, 3311 Toledo Road, room 2402, Hyattsville, Maryland 20782.

Proposed changes intended for October 1, 2009 implementation are so noted in the summary below. All other proposed changes are intended to be implemented October 1, 2010. **The deadline for receipt of public comments on the code proposals slated for implementation on October 1, 2009 is April 3, 2009. The deadline for receipt of public comments on code proposals slated for implementation on October 1, 2010 is June 12, 2009.**

The next meeting of the ICD-9-CM Coordination and Maintenance Committee is scheduled for September 16-17, 2009 and will be held at the CMS building in Baltimore, MD. New proposals for inclusion on this agenda must be received by **July 17, 2009**.

DIAGNOSES

Post Traumatic Seizures

The National Association of Epilepsy Centers and the American Academy of Neurology have requested a new code for post traumatic seizures. This code would be distinct from post traumatic epilepsy. Post traumatic seizures are acute, symptomatic seizures following a head injury. The presenter noted that post traumatic seizure disorder would be coded as epilepsy, since “seizure disorder” is a synonym for epilepsy.

Cognitive Deficits related to Traumatic Brain Injury (TBI) and Neurological Conditions

At the September 2008 ICD-9-CM C&M Committee meeting, the Department of Defense and the Veterans Administration jointly requested changes to the ICD-9-CM classification to better classify traumatic brain injury (TBI) and its associated conditions. These codes would be used to describe cognitive impairments, such as problems with memory, concentration, attention, communication, and executive function. Based on comments NCHS received, a revised proposal was presented at the March C&M Committee meeting.

The revised proposal would create a new subcategory for signs and symptoms involving cognition in category 799, Other ill-defined and unknown causes of morbidity and mortality. This subcategory would exclude cognitive deficits classified elsewhere, such as mild cognitive impairment, so stated, and cognitive deficits due to late effect of cerebrovascular disease.

Escherichia Coli – Expansion for O157:H7

Although most strains of *Escherichia coli* (*E. coli*) are harmless, some can cause diarrhea, while others may cause urinary tract infections, respiratory illness, and other illnesses. Some types of *E. coli* cause disease by making a toxin called Shiga toxin (STEC). The most commonly identified STEC in North America is *E. coli* O157:H7. News reports about outbreaks of *E. coli* infections are usually referring to *E. coli* O157:H7. Exposures that result in illness include consumption of contaminated food, unpasteurized milk, or water that has not been disinfected. Infection with this organism has been associated with the development of hemolytic uremic syndrome.

A unique code to distinguish *E. coli* O157:H7 from other types of *E. coli* infection has been proposed.

Personal History of Corrected Congenital Malformations

Due to advances in medical science, many congenital conditions can be repaired and leave little or no residual condition. An expansion of subcategory V13.6, Congenital malformations, has been proposed to identify personal history of congenital anomalies by body system. In addition, the title of subcategory V13.6 would be revised to state “congenital (corrected) malformations.” The proposal includes a code for personal history of (corrected) congenital inborn errors of metabolism and chromosomal anomalies, and an attendee raised a question concerning whether it is possible to correct congenital inborn errors of metabolism.

Acute Idiopathic Pulmonary Hemorrhage in Infants

Acute Idiopathic Pulmonary Hemorrhage in Infants (AIPHI) is characterized by pulmonary hemorrhage in a previously healthy infant with gestational age over 32 weeks and no history of prior medical problems that cause pulmonary hemorrhage; abrupt onset of bleeding or blood in the airway; severe presentation of the pulmonary hemorrhage leading to acute respiratory distress or respiratory failure, resulting in hospitalization in a pediatric intensive care unit with intubation or mechanical ventilation; and diffuse, bilateral pulmonary infiltrates on chest x-ray or computerized tomography of the chest.

Although AIPHI is relatively rare, expansion of code 786.3, Hemoptysis, has been proposed in order to create a unique code for AIPHI for tracking purposes.

Heart Failure

Several heart failure proposals were presented:

Rheumatic Heart Failure

Currently, when a patient has rheumatic heart failure, it is not possible to identify the type of heart failure or whether it is acute or chronic. An instructional note has been proposed under category 391, Rheumatic fever with heart involvement, to indicate that an additional code from category 428, Heart failure, should be used if heart failure is present. An instructional note has also been proposed under code 398.91, Rheumatic heart failure (congestive), to indicate that an additional code from the range of codes 428.0-428.43 should be assigned to identify the type of heart failure.

Congestive Heart Failure Issues

Since the creation of codes for systolic heart failure, diastolic heart failure, and combined systolic and diastolic heart failure, there have been questions about how these codes should be used together with existing codes, particularly the code for congestive heart failure (CHF). A couple of different proposals were presented. One proposal would involve incorporating the concept of CHF into the codes for systolic and diastolic heart

failure. The titles of existing codes for systolic and diastolic heart failure would be modified to state “not specified as congestive” and new codes would be created to identify systolic and diastolic heart failure with mention of congestion.

A second proposal was intended to address situations when CHF is specified as acute or chronic, but systolic or diastolic heart failure is not documented. Code 428.0, Congestive heart failure, unspecified, would be expanded to capture acute CHF, chronic CHF, and acute on chronic CHF.

Acute Heart Failure Classification and Related Heart Failure Issues

A new code for low output syndrome was proposed. Heart failure may be classified as “forward” or “backward.” “Forward” failure indicates poor perfusion, with symptoms of cold extremities and potential ischemic effects on organs. “Backward” failure indicates symptoms primarily from congestion (these may be termed “wet”). Low output syndrome involves “forward” heart failure with tissue hypoperfusion.

A new code has also been proposed for high output failure. High output failure is a relatively uncommon cause of acute heart failure. It generally manifests with warm peripheral extremities, pulmonary congestion, and at times low blood pressure with high cardiac output and usually elevated heart rate. Underlying conditions that may cause high output failure include sepsis, arrhythmias, anemia, thyrotoxicosis, and Paget disease.

A creation of a new subcategory in category 428, Heart failure, for right heart failure has been proposed. New codes would be created to differentiate acute, chronic, and acute on chronic right heart failure. Right-sided acute heart failure presents with increased jugular venous pressure, evidence of right-sided congestion (such as hepatomegaly and peripheral edema), and evidence of low output syndrome with hypotension. Right-sided heart failure is increasingly recognized as patients with chronic obstructive pulmonary disease develop cor pulmonale, and as there is greater appreciation for the prevalence of pulmonary hypertension.

It was proposed that decompensated combined systolic and diastolic heart failure be indexed to code 428.43, decompensated diastolic heart failure be indexed to code 428.33, and decompensated systolic heart failure be indexed to code 428.23. In each case, “decompensated” would be indexed to the “acute on chronic” code. It was suggested during the C&M meeting that compensated systolic and diastolic heart failure should be indexed to the “chronic” codes.

It was proposed to add inclusion terms related to ejection fraction under the subcategories for systolic heart failure, diastolic heart failure, and combined systolic and diastolic heart failure. The ejection fraction is a measure of the left ventricular function. In systolic heart

failure, the ejection fraction is reduced. In diastolic heart failure, the ejection fraction is normal. In combined systolic and diastolic heart failure, the ejection fraction is reduced along with diastolic dysfunction.

Acute Pulmonary Edema with Other Conditions

Acute pulmonary edema may occur in respiratory conditions and also in other conditions, including heart failure. It was proposed that an instructional note be added under category 428, Heart Failure, to indicate that an additional code should be assigned to identify any associated acute pulmonary edema. It was also proposed that code 518.4, Acute edema of lung, unspecified, be expanded to create specific codes for postoperative pulmonary edema and acute pulmonary edema with conditions classified elsewhere.

Aortic Ectasia

Aortic ectasia includes diffuse and irregular dilation of the aorta that is less than 3 centimeters in diameter. In one study, close to 20% of the patients with aortic ectasia in the abdomen over time developed abdominal aortic aneurysm. Currently, aortic ectasia is indexed to code 441.9, Aortic aneurysm of unspecified site without mention of rupture. However, these patients do not have an aortic aneurysm. Therefore, an expansion of code 447.8, Other specified disorders of arteries and arterioles, has been proposed to create a unique code for aortic ectasia. If an aneurysm is present, only the aneurysm code would be assigned.

In order to differentiate aortic ectasia from annuloaortic ectasia, which involves dilation of the aortic valve root, annuloaortic ectasia would be specifically indexed to code 424.1, Aortic valve disorders.

Difficult Airway

The American Society of Anesthesiologists has requested an ICD-9-CM diagnosis code to describe a difficult airway where anatomical variations or abnormalities are causing or may cause difficulties with: spontaneous ventilation, controlled ventilation by mask, or endotracheal intubation. Anesthesiologists are called in to assist with intubation, maintaining airway, or ventilation problems because of the difficult airway. If approved, the new code would be created in subcategory 786.0, Dyspnea and respiratory abnormalities, and it would be used to describe a general symptom of difficult airway when a related definitive diagnosis has not been established (confirmed) by the provider.

Awaiting Joint Prosthesis

Sometimes it is necessary to remove a joint prosthesis (e.g., because of an infection of that site), and the patient is readmitted at a later time (after the infection heals) for implantation of a new prosthesis. Currently, when the patient is readmitted for

implantation of the new prosthesis, the code for acquired deformity of the site would be assigned. Creation of a unique code to indicate the patient is in the status of awaiting a joint prosthesis has been requested. The new code would be created in subcategory V54.8, Other orthopedic aftercare, and would be titled “Aftercare following joint prosthesis explantation.” An inclusion term for “explantation status” would be listed under this code. It was intended that a single code would be used regardless of whether or not the current admission/encounter was for a procedure to implant a new prosthesis. Meeting attendees recommended creating separate codes for “aftercare” and “status” involving explantation of a joint prosthesis because these terms have different meanings in ICD-9-CM.

Cocaine Poisoning

A unique code for cocaine poisoning has been proposed. Cocaine poisoning is currently indexed to code 970.8, Poisoning by other specified central nervous system stimulants.

Body Mass Index

The American College of Obstetricians and Gynecologists has requested an expansion of the BMI codes to allow for specificity of BMI over 50. Code V85.4, Body Mass Index 40 and over, adult, would be expanded to create new codes for BMI 40.0 to 49.9 and BMI 50 and over.

Fecal Incontinence

The American College of Obstetricians and Gynecologists has requested unique codes for fecal impaction, full incontinence of feces, incomplete defecation, fecal smearing, and fecal urgency. The code for fecal impaction would be created in subcategory 560.3, Impaction of intestine, and code 787.6, Incontinence of feces, would be expanded to create new codes for the specific types of fecal incontinence symptoms.

Müllerian Anomalies

Müllerian anomalies include all congenital anomalies of the uterus, cervix, and vagina. They do not include congenital anomalies of the ovaries, which have a different embryologic origin. The American Society of Reproductive Medicine has identified seven types of uterine anomalies: agenesis, unicornuate, didelphus, bicornuate, arcuate, and Diethylstilbestrol (DES)-related anomalies. Of these, only didelphus and DES-related anomalies have unique ICD-9-CM codes. It is important to be able to differentiate between these different types of congenital anomalies because they have specific gynecologic and obstetric implications and management.

The incidence of uterine anomalies is difficult to determine since many women are asymptomatic and are not diagnosed unless there is a problem with conception or

maintenance of a pregnancy. Depending on the anomaly, increased rates of first and second trimester spontaneous abortion, preterm labor, preterm delivery, and malpresentation are recognized.

Vaginal and cervical anomalies are less common than uterine anomalies. Many of these anomalies obstruct menstrual flow and can cause amenorrhea or cyclic pelvic pain, as well as causing problems with conception and pregnancy. Currently, ICD-9-CM has unique codes only for imperforate hymen and embryonic cyst of cervix, vagina, and external female genitalia.

The American College of Obstetricians and Gynecologists has proposed a number of new codes for specific types of Müllerian anomalies. Meeting attendees noted that a default code for Müllerian anomaly, not otherwise specified, would need to be identified if the proposal is approved.

Personal History of Vaginal and Vulvar Dysplasia

New codes for personal history of vaginal and vulvar dysplasia have been proposed. Patients who have had vaginal or vulvar dysplasia are seen every 4 to 6 months following treatment to verify that there has been no recurrence. This history may be the sole reason for the encounter.

Diagnosis Addenda

Proposed diagnosis addenda changes were reviewed. Proposed revisions for consideration for implementation October 1, 2009 include:

- Relocation of “Merkel cell carcinoma, unknown primary site,” from code 209.37 (not an existing code yet – it was expected to become effective October 1, 2009) to code 209.75, which would place this condition in the subcategory for secondary neuroendocrine tumors;
- Revision of title of code 453.2 to state “of inferior vena cava;”
- Deletion of inclusion term for “acute renal disease” under code 593.9, Unspecified disorder of kidney and ureter
- Addition of inclusion terms for “personal history of malignant neoplasm NOS” and “personal history of malignant neoplasm of unspecified site and unspecified histology.”

Proposed revisions for consideration for implementation October 1, 2010 include:

- Addition of Excludes note for “hypothyroidism resulting from administration of radioactive iodine (244.1)” under code 244.2, Iodine hypothyroidism;
- Addition of instructional note under category 279, Disorders involving the immune mechanism, indicating that an additional code should be assigned for associated manifestations;

- Addition of a sentence to the note under category 438, Late effects of cerebrovascular disease, indicating that the codes in this category are not for use for manifestations that are treated and resolve during the initial episode of care;
- Addition of Excludes note under category 438, Late effects of cerebrovascular disease, indicating that manifestations occurring during the initial episode of care should be coded to the manifestations;
- Addition of inclusion terms for several specific sites under codes 453.51, Chronic venous embolism and thrombosis of deep vessels of proximal lower extremity, and 453.52, Chronic venous embolism and thrombosis of deep vessels of distal lower extremity, to clarify the sites that are classified to these codes;
- Addition of inclusion term for “periurethral trauma” under subcategory 664.8, Other specified trauma to perineum and vulva;
- Addition of instructional note under subcategory 670.2, Puerperal sepsis, indicating that an additional code should be assigned to identify severe sepsis and any associated acute organ dysfunction, if applicable;
- Addition of instructional note under subcategory 671.2, Superficial thrombophlebitis complicating pregnancy and the puerperium, indicating that an additional code should be assigned to identify the superficial thrombophlebitis (453.6, 453.71, 453.81);
- Addition of Index entry for fracture blister (omit code);
- Addition of Index entries for major depression;
- Addition of Index entry for diabetes with loss of protective sensation (LOPS) – see diabetes, neuropathy;
- Revision of Index entry for encephalomalacia (348.8);
- Addition of Index entries for demand and supply ischemia (414.9) – see also angina;
- Addition of Index entry for multilobar pneumonia – see pneumonia, by type;
- Addition of Index entry for pregnancy complicated by pneumonia (648.9).

PROCEDURES

Intravenous Infusion of Clofarabine

Clofarabine is a chemotherapeutic agent with US Food and Drug Administration (FDA) approval granted in 2004 for the treatment of pediatric patients with relapsed or refractory acute lymphoblastic leukemia after at least two prior regimens. It represents an alternative chemotherapy option for elderly patients with acute myeloid leukemia. These patients have a universally poor prognosis and often cannot tolerate standard induction chemotherapy with its attendant toxicity, especially if they have one or more poor prognostic indicators, such as poor performance status, advanced age, or unfavorable cytogenetics. Clofarabine has been shown to offer improved complete and partial remission rates in elderly patients with acute myeloid leukemia with less toxicity.

A supplement to the pediatric application is pending with the FDA, requesting approval of clofarabine for the treatment of previously untreated older adults with acute myeloid leukemia with at least one unfavorable baseline prognostic factor. New technology add-on payment under the Medicare hospital inpatient prospective payment system has also been requested.

Creation of new subcategory 17.7, Other pharmaceuticals, and a new code for intravenous infusion of clofarabine has been proposed. A meeting attendee recommended that the title of proposed new subcategory 17.7 be broadened so that this subcategory could be used for procedures and services other than pharmaceuticals.

Virtual Histology Intravascular Ultrasound (VH-IVUS)

VH-IVUS is the first and one of the newest technologies enabling real time compositional assessment of atherosclerotic plaques in coronary arteries. This technology uses advanced analytical techniques to overcome limitations of gray-scale IVUS by providing a more detailed analysis of plaque morphology. This includes a reconstructed color-coded tissue map of plaque composition superimposed on cross-sectional images of the coronary artery. Real-time VH-IVUS also provides images in tomographic and longitudinal views as well as a quantitative measure of the cross-section of the vessel and a quantitative measure of lesion length and tissue characterization. VH-IVUS has the potential of providing patient-specific plaque analysis and monitoring the treatment response to drug therapy for acute coronary syndrome. The presenter noted that although the predominant use of this technology today is in coronary vessels, it does have the potential to be used in other anatomical areas in the future.

A unique code for VH-IVUS was proposed. However, CMS recommended that existing code 00.24, Intravascular imaging of coronary vessels, continue to be assigned for this technology instead of creating a unique code. CMS believes that VH-IVUS is adequately captured by the existing code, and they are also concerned that this technology will not be clearly distinguished from the traditional IVUS procedure in the medical record documentation.

Intravascular Optical Coherence Tomography

Optical coherence tomography (OCT) uses near-infrared electromagnetic radiation light for the cross-sectional visualization of the vessel wall at the microscopic level. It enables excellent resolution of coronary architecture and precise characterization of plaque architecture. Quantification of macrophages within the plaque is also possible. These capabilities allow precise identification of the most clinically significant type of vulnerable plaque, the thin-cap fibroatheroma. OCT is also being used to assess the concentration, thickness and uniformity of endothelial growth over stented vessels. Late stent thrombosis and re-stenosis are often related to tissue growth over the stent. The use of OCT may enable physicians to determine whether it is appropriately covered and then make some changes in the procedural and/or pharmacological treatments of the patient if needed.

Creation of new codes to identify the use of OCT of coronary and non-coronary vessels has been proposed. Two alternative approaches for the creation of new codes were presented. In one option, two codes would be created that distinguish OCT in coronary and non-coronary vessels. In the second option, six new codes would be created to identify OCT by anatomical site.

Procedure Addenda

Proposed procedure addenda changes were reviewed. Proposed revisions include:

- Addition of instructional note under code 34.1, Incision of mediastinum, indicating that any biopsy that was performed should be coded also;
- Revision of title of code 39.90 to state “insertion of non-drug-eluting peripheral (non-coronary) vessel stent(s);
- Addition of Index entry for adjustment of orthopedic device (non-invasive), external fixator (omit code);
- Addition of Index entry for conversion of atrial rhythm (to sinus rhythm) (99.61);
- Addition of Index entry for insertion of Impella[®] external heart assist device (37.68);
- Revision of Index entry for measurement of intrauterine pressure (75.35).

ICD-10 Implementation

Pat Brooks provided an overview of the ICD-10-CM/PCS Final Rule and also discussed implementation issues, structural differences between the ICD-9-CM and ICD-10-CM/PCS code sets, availability of mappings, and the conversion of MS-DRGs to ICD-10-CM/PCS codes. ICD-10-CM and ICD-10-PCS will be implemented on October 1, 2013 and will replace ICD-9-CM diagnoses and procedures as the HIPAA standard. Pat further clarified that the implementation date will include those ambulatory and physician services that occur on or after October 1, 2013. ICD-9-CM codes will not be accepted for services provided on or after October 1, 2013.

CMS has worked collaboratively with the American Hospital Association, American Health Information Management Association, and the Centers for Disease Control and Prevention to develop a series of outreach calls on ICD-10-CM/PCS. There will be additional educational efforts in the future. Information on educational resources can be found on the CMS web site, at this link:

http://www.cms.hhs.gov/ICD10/05_Educational_Resources.asp. Information on the outreach calls, including presentation slides and copies of the transcripts, can be found at this link: http://www.cms.hhs.gov/ICD10/07_Sponsored_Calls.asp.

Pat asked meeting attendees to consider whether it would be necessary to freeze updates to ICD-9-CM and/or ICD-10-CM/PCS prior to ICD-10-CM/PCS implementation and to be prepared to discuss this topic at the September 16-17, 2009 C&M Committee meeting.

ICD-10 General Equivalence Mappings

Rhonda Butler, 3M, explained how the mappings were created, their purpose, and how to use the mappings. The general equivalence mappings (GEMs) are a bi-directional code translation dictionary between ICD-9-CM and ICD-10-CM/PCS. The GEMs are designed to aid in converting applications and systems from ICD-9-CM to ICD-10-CM/PCS. The reimbursement mappings are designed to be interposed between data submitted using ICD-10-CM/PCS codes and legacy systems using ICD-9-CM codes so data can continue to be processed without converting the legacy system to ICD-10-CM/PCS. The reimbursement mappings are intended as an interim measure while systems are being

converted. Rhonda's slide presentation is posted with other documents from the C&M meeting on the CMS web site.

MS-DRG Conversion to ICD-10 Update

Rhonda Butler and Janice Bonazelli from 3M discussed the ongoing work of converting the MS-DRGs from ICD-9-CM codes to ICD-10-CM/PCS codes. The conversion of all medical MS-DRGs is complete and conversion of the surgical MS-DRGs is underway. A conversion goal is that the same patient, coded in ICD-9-CM or ICD-10-CM/PCS, is assigned to the same MS-DRG. A draft of the ICD-10-CM/PCS MS-DRGs definitions manual will be posted on CMS' website with the annual ICD-10-CM/PCS update at the end of 2009. The final version of MS-DRGs using ICD-10-CM/PCS codes will be subject to the rulemaking process. The complete slide presentation is posted with other documents from the C&M meeting on the CMS web site.

ICD-10-PCS Update

Rhonda Butler provided an update on the 2009 version of ICD-10-PCS and Pat Brooks discussed the process for requesting updates to ICD-10-PCS. A new resource for 2009 is the ICD-10-PCS Final Addenda, which is a comprehensive report of codes added and deleted and descriptions revised. The ICD-10-PCS Body Part Key is also new for 2009. It is a public domain reference for the body part descriptions used in ICD-10-PCS and is arranged by both anatomical term and ICD-10-PCS body part.

New codes are added to ICD-10-PCS in parallel with ICD-9-CM changes and in response to public requests to CMS. Codes are deleted or code descriptions revised as a result of ongoing improvements from internal review and public feedback. Ongoing enhancements are made to ICD-10-PCS and the draft guidelines in response to public requests and as needed for clarity and ease of use.

ICD-10 Comments and Questions

Pat Brooks and Rhonda Butler addressed specific questions received in advance of the C&M meeting concerning the ICD-10-CM/PCS GEMs. A summary of the top 10 questions and answers can be found in the meeting summary for the procedure portion of the C&M meeting, which is posted with other documents from the C&M meeting on the CMS web site.