



---

## SUMMARY REPORT

### ICD-9-CM COORDINATION AND MAINTENANCE COMMITTEE

April 3, 2003

#### Procedures Discussions

##### Introduction and Overview

Pat Brooks welcomed the participants to the ICD-9-CM Coordination and Maintenance (C&M) Committee meeting. Both the diagnosis and procedure part of the meeting were held on April 3, 2003. There were about 100 participants who attended the meeting. All participants introduced themselves. An overview of the C&M Committee was provided. It was explained that the Committee meetings serve as a public forum to discuss proposed revisions to the ICD-9-CM. The public is given a chance to offer comments and ask questions about the proposed revisions. **No final decisions on code revisions take place at the meeting.**

As this is strictly a coding meeting, no discussion is held concerning DRG assignment or reimbursement issues. After the meeting, a summary of the procedure part of the meeting is posted on the home pages of CMS. The diagnosis part of the meeting is conducted by the National Center for Health Statistics (NCHS). NCHS posts a summary of the diagnosis part of the meeting on their home page.

We encourage the public to submit written comments by mail or e-mail concerning issues raised at the meeting. Proposed procedure code revisions are under consideration to be included in the October 1, 2004 addendum. However, consideration can be given to fast track procedure proposals for inclusion in the October 1, 2003 addendum when the public clearly supports the proposals and there are no outstanding issues.

Copies of the timeline were presented to participants. This timeline discusses important events relating to the updating of ICD-9-CM. The next C&M meeting will be held on December 4-5, 2003. Suggestions for the agenda must be received by October 3, 2003.

## **Topics**

### **1. ICD-10-PCS Update**

Pat Brooks provided a brief update on ICD-10-PCS activities. The 2002 draft of ICD-10-PCS is currently posted on CMS' website at: [www.cms.hhs.gov/paymentsystems/icd9](http://www.cms.hhs.gov/paymentsystems/icd9). This draft includes all changes that were made during 2002 as a result of recommendations from the public as well as comparable changes to ICD-9-CM procedures. The 2002 conversion table is not yet completed. However, it should be posted in the near future.

Pat referred the participants to the Summary Report of the December 6, 2002 meeting of the ICD-9-CM Coordination and Maintenance Committee for a complete description of ICD-10-PCS activities including discussions by the National Committee on Vital and Health Statistics. Pat deferred to Donna Pickett to discuss plans for an impact analysis for moving to ICD-10-CM and ICD-10-PCS.

### **2. MAZE Procedure**

Ann Fagan led this presentation. A formal presentation from a device manufacturer was to have been made, however this presentation was cancelled. We discussed the topic in terms of the use of existing codes, and proposed changes to the Tabular and Index portions of the procedure manual to facilitate correct coding. Suggestions were made to change the titles of codes 37.33 and 37.34 in order to specify the approaches as "open" and "other". Additionally, the suggestion was made to not capitalize the word maze, as it refers to the maze-like result of treatment, not an eponym. As we intend to clarify the procedure manual's Tabular and Index with the October 1, 2003 annual changes, commenters are encouraged to submit their comments in writing immediately.

### **3. Laparoscopic gastric procedures**

Ann Fagan led this presentation. This presentation is part of an ongoing effort to expand the procedure part of the ICD-9-CM with "scope" procedures that were not yet invented when the Ninth Revision was originally created for use in 1979. The background paper is included below in its entirety. There were very few suggestions at the time of the meeting. Commenters are encouraged to submit any comments prior to the January 10, 2004 deadline for consideration for October 1, 2004 annual changes.

### **4. Addenda**

Amy Gruber led a discussion on the proposed addenda. There was general support for all the recommendations. One participant expressed concern that both kyphoplasty and vertebroplasty would be indexed to code 78.49, Other repair or plastic operations on bone. However, there was no alternative code suggested. These addenda proposals will be fast tracked for this October 1, 2003 Final Addenda so the attendees were requested to submit their comments quickly.

This concluded the procedure part of the meeting. The meeting was turned over to the National Center for Health Statistics (NCHS) who conducted the diagnosis part of the meeting. For a summary report of the diagnosis part of the meeting, go to:

[www.cdc.gov/nchs/icd9.htm](http://www.cdc.gov/nchs/icd9.htm)

DEPARTMENT OF HEALTH & HUMAN SERVICES  
Centers for Medicare & Medicaid Services  
7500 Security Boulevard  
Baltimore, Maryland 21244-1850



---

## Agenda

ICD-9-CM Coordination and Maintenance Committee  
Department of Health and Human Services  
Centers for Medicare & Medicaid Services  
CMS Auditorium  
7500 Security Boulevard  
Baltimore, MD 21244-1850  
ICD-9-CM Volume 3, Procedures  
April 3, 2003

Patricia E. Brooks  
Co-Chairperson

9:00 AM ICD-9-CM Volume 3, Procedure presentations and public  
comments

### Topics:

1. ICD-10-Procedure Classification System (PCS) – Update  
Patricia E. Brooks
2. Maze Procedure  
Ann B. Fagan
3. Laparoscopic Gastric Procedures  
Ann B. Fagan
4. Addenda  
Amy L. Gruber

## C&M Visitor List Notice

Because of increased security requirements, those who wish to attend a specific ICD-9-CM Coordination and Maintenance Committee meeting in the CMS auditorium must submit their name and organization for addition to the meeting visitor list. Those wishing to attend the December 4-5, 2003 meeting must submit their name and organization by November 28, 2003 for inclusion on the visitor list. This visitor list will be maintained at the front desk of the Centers for Medicare and Medicaid Services (CMS) and used by the guards to admit visitors to the meeting. Those who attended previous ICD-9-CM Coordination and Maintenance Committee meetings will no longer be automatically added to the visitor list. You must request inclusion of your name prior to each meeting you attend.

Send your name and organization to one of the following by November 28, 2003 in order to attend the December 4-5, 2003 meeting:

Pat Brooks	<a href="mailto:pbrooks1@cms.hhs.gov">pbrooks1@cms.hhs.gov</a>	410-786-5318
Ann Fagan	<a href="mailto:afagan@cms.hhs.gov">afagan@cms.hhs.gov</a>	410-786-5662
Amy Gruber	<a href="mailto:agruber@cms.hhs.gov">agruber@cms.hhs.gov</a>	410-786- 1542

ICD-9-CM Volume 3, Procedures Coding Issues:

Mailing Address:

Centers for Medicare & Medicaid Services  
CMM, HAPG, Division of Acute Care  
Mail Stop C4-08-06  
7500 Security Boulevard  
Baltimore, MD 21244-1850

FAX: (410) 786-0681

Summary of Meeting:

A complete report of the meeting, including handouts, will be available on CMS's homepage within one month of the meeting. Written summaries will no longer be routinely mailed. The summary can be accessed at:

<http://www.cms.hhs.gov/paymentsystems/icd9>

## **ICD-9-CM TIMELINE**

A timeline of important dates in the ICD-9-CM process is described below:

- August 1, 2002      Hospital Inpatient Prospective Payment System final rule published in the Federal Register as mandated by Public Law 99-509. This included all code titles included in the proposed notice as well as any other procedure code titles that were discussed at the April 18, 2002 meeting and resolved in time for implementation on October 1, 2002. This rule can be accessed at:  
<http://www.cms.hhs.gov/regulations/>
- October 1, 2002      New and revised ICD-9-CM codes go into effect along with DRG changes. Final addendum posted web pages as follows: Diagnosis addendum  
<http://www.cdc.gov/nchs/icd9.htm> and procedure addendum at: <http://www.cms.hhs.gov/paymentsystems/icd9>
- Nov. 19-20, 2002      National Committee on Vital and Health Statistics, Subcommittee on Standards and Security - Hearing on HIPAA Code Set Issues. A discussion was held on whether or not ICD-10-PCS should be named a national standard. Information on this meeting can be found at:  
<http://www.ncvhs.hhs.gov/>
- Dec. 6, 2002      ICD-9-CM Coordination and Maintenance Committee Meeting. Code revisions discussed are for potential implementation on October 1, 2003.
- December 2002      Summary report of the Procedure part of the December 6, 2002 ICD-9-CM Coordination and Maintenance Committee meeting posted on CMS homepage as follows:  
<http://www.cms.hhs.gov/paymentsystems/icd9>
- Summary report of the Diagnosis part of the December 6, 2002 ICD-9-CM Coordination and Maintenance Committee meeting report will be posted on NCHS homepage as follows:  
<http://www.cdc.gov/nchs/icd9.htm>
- January 10, 2003      Deadline for receipt of public comments on proposed code revisions discussed at the April 18 - 19, 2002 and December 6, 2002 ICD-9-CM Coordination and Maintenance

Committee meetings. These proposals are being considered for implementation on October 1, 2003.

- February 3, 2003 Those members of the public requesting that topics be discussed at the April 3, 2003 ICD-9-CM Coordination and Maintenance Committee meeting should have their requests to CMS for procedures and NCHS for diagnoses.
- April 2003 Notice of Proposed Rulemaking to be published in the Federal Register as mandated by Public Law 99-509. This will include the final decisions on ICD-9-CM diagnosis and procedure code titles, which were discussed at the meetings held on April 18-19, 2002 and December 6, 2002. It will also include proposed revisions to the DRG system on which the public may comment. It will not include additional procedure codes that will be discussed at the April 3, 2003 meeting and that might also be included in the October 1, 2003 addendum. The proposed rule can be accessed at: <http://www.cms.hhs.gov/regulations/>
- April 3, 2003 ICD-9-CM Coordination and Maintenance Committee Meeting in CMS's auditorium. Diagnosis code revisions discussed are for potential implementation on October 1, 2004. Procedure code revisions may be for October 1, 2003 if they can be resolved quickly and finalized by April 30, 2003. Those procedure code proposals that cannot be resolved quickly will be considered for implementation on October 1, 2004.
- May 2003 Summary report of the Procedure part of the April 3, 2003 ICD-9-CM Coordination and Maintenance Committee meeting will be posted on CMS homepage as follows: <http://www.cms.hhs.gov/paymentsystems/icd9>
- Summary report of the Diagnosis part of the April 3, 2003 ICD-9-CM Coordination and Maintenance Committee meeting report will be posted on NCHS homepage as follows: <http://www.cdc.gov/nchs/icd9.htm>
- June 2003 Final addendum posted web pages as follows: Diagnosis addendum: <http://www.cdc.gov/nchs/icd9.htm> and procedure addendum at: <http://www.cms.hhs.gov/paymentsystems/icd9>

- August 1, 2003 Hospital Inpatient Prospective Payment System final rule to be published in the Federal Register as mandated by Public Law 99-509. This will include all code titles included in the proposed notice as well as any other procedure code titles that were discussed at the April 3, 2003 meeting and resolved in time for implementation on October 1, 2003. This rule can be accessed at:  
<http://www.cms.hhs.gov/regulations/>
- October 3, 2003 Those members of the public requesting that topics be discussed at the December 4-5, 2003 ICD-9-CM Coordination and Maintenance Committee meeting should have their requests to CMS for procedures and NCHS for diagnoses.
- November 2003 Tentative agenda for the Procedure part of the December 4, 2003 ICD-9-CM Coordination and Maintenance Committee meeting will be posted on CMS homepage as follows:  
<http://www.cms.hhs.gov/paymentsystems/icd9>
- Tentative agenda for the Diagnosis part of the December 5, 2003 ICD-9-CM Coordination and Maintenance Committee meeting will be posted on NCHS homepage as follows:  
<http://www.cdc.gov/nchs/icd9.htm>
- Federal Register notice of December 4-5, 2003 ICD-9-CM Coordination and Maintenance Committee Meeting to be published. This will include the tentative agenda.
- November 2003 **Because of increased security requirements, those who wish to attend a specific ICD-9-CM Coordination and Maintenance Committee meeting must submit their name and organization for addition to the meeting visitor list. Those wishing to attend the December 4-5, 2003 meeting must submit their name and organization by November 28, 2003 for inclusion on the visitor list.** This visitor list will be maintained at the front desk of the Centers for Medicare and Medicaid Services (CMS) and used by the guards to admit visitors to the meeting. **Those who attended previous ICD-9-CM Coordination and Maintenance Committee meetings will no longer be automatically added to the visitor list. You must request inclusion of your name prior to each meeting you attend.**
- Send your name and organization to one of the following**



**by November 28, 2003 in order to attend the December 4-5, 2003 meeting:**

Pat Brooks [PBrooks1@cms.hhs.gov](mailto:PBrooks1@cms.hhs.gov) 410-786-5318  
Ann Fagan [afagan@cms.hhs.gov](mailto:afagan@cms.hhs.gov) 410-786-5662  
Amy Gruber [agruber@cms.hhs.gov](mailto:agruber@cms.hhs.gov) 410-786-1542

- Dec. 4-5, 2003 ICD-9-CM Coordination and Maintenance Committee Meeting. Code revisions discussed are for potential implementation on October 1, 2004. December 4 will be devoted to discussions of procedure codes. December 5 will be devoted to discussions of diagnosis codes.
- December 2003 Summary report of the Procedure part of the December 4-5, 2003 ICD-9-CM Coordination and Maintenance Committee meeting will be posted on CMS homepage as follows:  
<http://www.cms.hhs.gov/paymentsystems/icd9>
- Summary report of the Diagnosis part of the December 4-5, 2003 ICD-9-CM Coordination and Maintenance Committee meeting report will be posted on NCHS homepage as follows:  
<http://www.cdc.gov/nchs/icd9.htm>
- January 10, 2004 Deadline for receipt of public comments on proposed code revisions discussed at the April 3, 2003 and not implemented on October 1, 2003 and December 4-5, 2003 ICD-9-CM Coordination and Maintenance Committee meetings. These proposals are being considered for implementation on October 1, 2004.

## ICD-10-PCS UPDATE

ICD-10-PCS is updated each year to include new technologies, improvements in the index, and procedures added to ICD-9-CM. The 2002 Draft ICD-10-PCS is currently posted on CMS' website at: [www.cms.hhs.gov/paymentsystems/icd9](http://www.cms.hhs.gov/paymentsystems/icd9). This draft includes the complete tabular and index sections of ICD-10-PCS. It also includes a training manual, PowerPoint speaker slides, and a conversion table between ICD-9-CM procedure codes and the 2001 version of ICD-10-PCS. The 2002 conversion table is almost complete and will be posted in the near future.

The status of ICD-10-PCS was discussed extensively at the December 6, 2002 meeting of the ICD-9-CM Coordination and Maintenance Committee. For a detailed description of the creation, testing, and updating of ICD-10-PCS as well as discussions by the National Committee on Vital and Health Statistics (NCVHS), see the Summary Report of the December 6, 2002 meeting of the ICD-9-CM Coordination and Maintenance Committee at: [www.cms.hhs.gov/paymentsystems/icd9](http://www.cms.hhs.gov/paymentsystems/icd9).

## Maze Procedure

### Background:

Clinically, chronic atrial fibrillation (AF) represents the most commonly encountered cardiac arrhythmia, with an estimated two million cases in the United States alone. While AF is not immediately life threatening, it is a major cause of morbidity including an increased likelihood of thrombus formation and subsequent strokes, and compromise of ventricular function by forcing the ventricles to contract at faster rates. In the majority of patients, AF develops in conjunction with other types of cardiovascular disease, such as heart failure. Initial episodes of AF often are self-terminating, but the duration of fibrillatory episodes increases over time and AF typically becomes chronic.

There are several goals in the treatment of atrial fibrillation. These include stroke prevention, rhythm or rate control, treatment of symptoms, and prevention of further clinical deterioration. Despite the seriousness and prevalence of the disease, medical treatment of AF at this time is, in general, unsatisfactory. Palliative treatments with antiarrhythmic and anticoagulatory drugs often do not permanently convert the arrhythmia to sinus rhythm or prevent stroke.

As a surgical alternative, the Maze procedure was developed after many years of research into the mechanisms of atrial fibrillation. Initially, the Maze procedure was a complex procedure designed to surgically divide the atrial tissue into multiple, connected compartments (similar to a maze, hence the name). The initial procedure has been refined and now comprises a more limited, yet equally effective and safer set of compartments. In the surgical Maze procedure, 'lines' are incised utilizing a scalpel and surgically cutting through the atrial tissue. Then the incision lines are sutured together again, creating the compartments. These anatomic incisions create an electrical barrier through which the reentrant wavelets of atrial fibrillation cannot propagate, thereby restoring sinus rhythm and atrial contractility.

Through study, it has been determined that the original surgical procedure can also be performed by non-surgical means, such as using cold or heat base ablation technologies to cauterize atrial tissue for the purpose of compartmentalization. The endocardial and epicardial sources of energy that have been used with success include microwave energy, ultrasound, laser, and cryoablation. Any type of approach that can create electrically insulated boundary zones can be potentially utilized to perform the Maze procedure. To reiterate, the procedure may be performed endocardially or epicardially to ablate tissue and create lines of electrical block.

The safety of the procedure is dependent on the technique utilized to perform the compartmentalization. Regarding the surgical approach, when the Maze procedure is performed as a concomitant, adjunctive procedure to other cardiac surgery (e.g. performed at the time of CABG, valve surgery, ASD repair) there does not appear to be mortality in excess of that for the main indication for the surgery. The stand-alone catheter procedure has a similarly low mortality and morbidity.

Long-term follow-up in patients who have undergone the Maze procedure reveals that between 70% and 90% of patients are in normal sinus rhythm at long-term follow-up, and that a high proportion of these patients also have significant return of atrial transport function. Most of these patients do not require a pacemaker, anti-arrhythmic therapy, or long-term anticoagulation, decreasing long-term risk and expense.

**CLINICAL SUMMARY :** Both surgical and catheter-based approaches are used to treat atrial fibrillation. The surgical approaches, based on the original Maze procedure, have had reasonable success in curing atrial fibrillation; endocardial catheter-ablation based approach much less so. The open-chest Maze procedure is rarely used alone. Rather, it is performed as a concomitant procedure to other cardiac surgery. The performance of the Maze procedure as an adjunctive procedure at the time of cardiac surgery has many advantages. It does not require a separate operation as the heart is already exposed, and it does not add a significant element of risk to the specific cardiac surgery.

The surgical Maze procedure does not appear to add excess morbidity or mortality to a combined procedure (Maze + valve/CABG), has an excellent success rate in restoring sinus rhythm, decreases the number of thromboembolic events, and improves atrial transport function and long term quality of life. A small percentage of patients may have residual atrial flutter and be cured by a post-operative, standard radiofrequency catheter ablation.

**Procedure:**

The standard approach for treating atrial fibrillation is through an open-heart surgical procedure. The sternum is opened with a 10-12 inch incision, giving surgeons access to the heart. Once the sternum is opened, the heart is stopped and the patient is placed on cardiopulmonary bypass. After the heart is placed on bypass, the ablation device (or other tissue ablative instrument) is used to create a strategic series of lesion sets. This ablation process (or clinical cellular death) creates scar tissue that blocks electrical conductivity through the atrium; therefore eradicating the arrhythmia. If an additional cardiac surgical procedure (i.e. mitral valve repair) is required, it is done at this time. Once the surgery has been completed, the heart is taken off of cardiopulmonary bypass, restored to sinus rhythm and the sternum is closed and sutured.

**Existing Coding Advice:**

The publication Coding Clinic for ICD-9-CM addressed the Maze procedure in the First Quarter 1997, page 12, with the following question and answer:

Question: A 46 year-old patient with drug refractory atrial fibrillation was admitted for surgical management. After cardiopulmonary bypass was established, the surgeon excised both atrial appendages, and applied cryolesions at the tricuspid valve annulus and mitral valve annulus. The surgeon described this as a Maze procedure. Please assist us in assigning the appropriate ICD-9-CM procedure code(s) for the Maze procedure.

Answer: Assign code 37.99, Other operations on heart and pericardium, Other, for the Maze procedure. During this procedure, incisions are made in both the right and left atrium that are affected by the refractory atrial fibrillation. When the incisions heal, they form scar tissue. The abnormal rhythms are unable to pass through the scar tissue.

**CMS Recommendation:**

In light of today's technology, CMS believes that the above question didn't precisely clarify that the procedure being performed was selective destruction of cardiac tissue. Therefore, we recommend the following changes to the procedure section of ICD-9-CM effective for the next update on October 1, 2003:

**Tabular**

	37.3	Pericardiectomy and excision of lesion of heart		
		37.33	Excision or destruction of other lesion or tissue of heart	
add inclusion term			Maze procedure	
			<i>Excludes: catheter ablation of lesion or tissues of heart</i>	
			(37.34)	
	37.34	Catheter ablation of lesion or tissues of heart		
		Cryoablation	}	
		Electrocurrent	}	of lesion or tissues of heart
Add inclusion term		Maze procedure	}	
		Resection	}	

**Index**

	Ablation			
	lesion			
		heart (ventricular)	37.33	
		by cardiac catheter	37.34	
add term		Maze procedure	37.33	
add term		by cardiac catheter	37.34	

## PROCEDURES PERFORMED THROUGH A SCOPE

### Topic Background:

The ICD-9-CM procedure coding system is not up-to-date with regard to describing procedures performed through a scope, such as a thoracoscope or laparoscope. We propose to discuss the addition of several new codes at this meeting and address additional topics future meetings. If you have any suggestions for clarification of scope procedures, please forward them.

### Background:

There have been industry requests to provide codes for laparoscopic procedures on the stomach.

### Recommendation:

Add new codes as follows:

- 44.3 Gastroenterostomy without gastrectomy
- new code 44.38 Other laparoscopic gastroenterostomy  
Bypass:
  - gastroduodenostomy
  - gastroenterostomy
  - gastrogastrostomyLaparoscopic gastrojejunostomy without gastrectomy NEC  
*Excludes: Other gastroenterostomy, open approach (44.39)*
- 44.6 Other repair of stomach
- add note 44.66 Other procedures for creation of esophagogastric sphincteric competence  
*Excludes: Laparoscopic procedures for creation of esophagogastric sphincteric competence (44.67)*
- new code 44.67 Laparoscopic procedures for creation of esophagogastric sphincteric competence
  - Fundoplication
  - Gastric cardioplasty
  - Nissen's fundoplication
  - Restoration of cardio-esophageal angle
- new code 44.68 Laparoscopic gastroplasty
  - Code also any synchronous laparoscopic gastroenterostomy (44.38)
  - Banding
  - Silastic vertical
  - Vertical banded gastroplasty
  - Excludes: other repair of stomach, open approach (44.61-44.65, 44.69)*
- 50.1 Diagnostic procedures on liver
- add term 50.19 Other diagnostic procedures on liver
  - Laparoscopic liver biopsy

## Proposed Addenda

### Index

- Add term            Kyphoplasty 78.49
- Add term            LASIK (Laser-assisted in situ keratomileusis) 11.71
- Add subterm        Scan, scanning  
                         MUGA (multiple gated acquisition) - see Scan, radioisotope

### Tabular List

- Add exclusion term    03.53 Repair of vertebral fracture  
                             Excludes:  
Add exclusion term        kyphoplasty (78.49)  
Add exclusion term        vertebroplasty (78.49)
- Revise code title      39.79 Other endovascular repair (of aneurysm) of other vessels