

# ICD-10-CM Major Milestones

May 27, 2019, updated 6/26/2019

The clinical modification of ICD-9 (ICD-9-CM, Volumes 1 and 2) was adopted in the United States in 1979 for morbidity applications, at the same time that ICD-9 (published by WHO) was adopted for mortality data. In addition to its use in health care records and surveys, ICD-9-CM is used to classify diseases and health conditions on health care claims and is the basis for prospective payment to hospitals, other health care facilities and health care providers.

The U.S. also developed its own procedure coding system (ICD-9-CM, Volume 3) for inpatient hospital services in the late 1970's to use with ICD-9-CM, Volumes 1 and 2 for diagnoses; this was necessary because the WHO had not produced a procedure coding system. Since 1979, procedures performed in hospitals have been coded for hospital statistics and on hospital claims, using ICD-9-CM, Vol. 3. The Current Procedural Terminology (CPT-4), developed and maintained by the American Medical Association, is used in the United States to code professional services on claims of physicians and other non-inpatient providers. All users code diagnoses with ICD-9-CM, Volumes 1 and 2. When the inpatient prospective payment system was implemented in 1983, ICD-9-CM, Volumes 1, 2 and 3 was used as the basis for assigning cases to the DRGs. All diagnostic and procedural information was captured using ICD-9-CM.

Because there had been radical changes and advances in health care since the implementation of ICD-9-CM, there quickly arose a need to update and revise the system. This was particularly true for the procedure codes of the system, but users also wanted to update the diagnosis portion to obtain greater clinical detail. Thus, an annual updating process was established through the ICD-9-CM Coordination and Maintenance Committee. Although this process continues to allow some addition of new conditions and procedures, and expansion for greater detail, it uses as its base a classification system that was developed nearly 30 years ago.

The timeline below details the development of the clinical modification of ICD-10 (ICD-10-CM) by the National Center for Health Statistics, CDC. NCHS is responsible for diagnosis classification in the United States. This timeline updates and expands upon the 1997-2003 timeline originally included with the November 2003 NCVHS letter to the Secretary recommending the adoption of ICD-10-CM as a HIPAA standard to replace ICD-9-CM diagnosis codes.

Year	Activity	Description	Initiator	Website Links to Documents, Recommendations and Reports
1988	NCVHS Annual Report	At the November meeting of NCVHS, the Subcommittee on Medical Classification Systems recommended, and the NCVHS endorsed, the important concept that there be no copyright by the World Health Organization that would impeded the use of ICD-10 in this country.  The Subcommittee was established in 1987 as a continuation of the subcommittee on Disease	NCVHS	NCVHS Annual Report, 1988 <a href="https://www.cdc.gov/nchs/data/ncvhs/nchvs88.pdf">https://www.cdc.gov/nchs/data/ncvhs/nchvs88.pdf</a>

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		Classification and Automated Coding of Medical Diagnoses, begun in 1983.		
1989	NCVHS Annual Report	The ICD-10 copyright issue occupied a prominent place on the agenda of each meeting of the Subcommittee during 1989.	NCVHS	<a href="https://www.cdc.gov/nchs/data/ncvhs/nchvs89.pdf">https://www.cdc.gov/nchs/data/ncvhs/nchvs89.pdf</a>
1990		ICD-10 was endorsed in May 1990 by the Forty-third World Health Assembly. It is cited in more than 20,000 scientific articles and used by more than 100 countries around the world.	World Health Assembly	<a href="https://www.who.int/classifications/icd/en/">https://www.who.int/classifications/icd/en/</a>
1990	NCVHS Annual Report	<p>The Subcommittee on Medical Classification Systems of NCVHS (established in 1987) reviewed chapter proposals from the WHO and preliminary international implementation plans for the 10<sup>th</sup> revision of the International Classification of Diseases.</p> <p>The NCVHS noted that while ICD-9-CM has been responsive to the changing technologies and identifying new diseases that impact heavily on the community, there is concern that the ICD classification system may be stressed to a point where the quality of the system may soon be compromised (NCVHS 1990 Annual Report, page 17).</p> <p>The November 1990 Report of the National Committee on Vital and Health Statistics Concerning Issues Relating to the Coding and Classification Systems concluded the following:</p> <ul style="list-style-type: none"> <li>• The Subcommittee review found structural problems with both CPT-4 and Volume 3 of ICD-9-CM.</li> <li>• An ongoing study and evaluation of the feasibility of a uniform procedures code is necessary. Such an evaluation should address HCFA's responsibility as a catalyst in determining the efficacy of a single procedure code.</li> </ul>	NCVHS	<p>NCVHS Annual Report, 1990</p> <p><a href="https://www.cdc.gov/nchs/data/ncvhs/nchvs90.pdf">https://www.cdc.gov/nchs/data/ncvhs/nchvs90.pdf</a></p>
1992	NCVHS Annual Report			<p>NCVHS Annual Report, 1992</p> <p><a href="https://www.cdc.gov/nchs/data/ncvhs/nchvs92.pdf">https://www.cdc.gov/nchs/data/ncvhs/nchvs92.pdf</a></p>

Year	Activity	Description	Initiator	Website Links to Documents, Recommendations and Reports
1993	NCVHS Annual Report	<p>The Subcommittee continued to address issues related to the International Classification of Diseases, 10<sup>th</sup> revision, focusing on the status and implementation of ICD-10 in the United States, with particular regard to morbidity applications. The Subcommittee initiated a letter from the NCVHS to the Assistant Secretary for Health and Administrator of the Health Care Financing Administration (HCFA) recommending that the Department dedicate resources to determine the feasibility of implementing ICD-10 for morbidity application in the United States.</p> <p>During 1993, the Subcommittee held three meetings and three working sessions dedicating a substantial portion of the meetings to developing and reviewing its report to recommend that steps be taken to create a single procedure classification system for multiple purposes in the United States (see ICD-10-PCS timeline for details)</p>	NCVHS	<a href="https://www.cdc.gov/nchs/data/ncvhs/nchvs93.pdf">https://www.cdc.gov/nchs/data/ncvhs/nchvs93.pdf</a>
1994-1997		Evaluation of ICD-10 for U.S. purposes	NCHS	NCVHS <a href="http://www.ncvhs.hhs.gov/031105a1.htm">http://www.ncvhs.hhs.gov/031105a1.htm</a>
1994 September		NCHS awarded contract to evaluate ICD-10. Prototype of ICD-10-CM developed	NCHS	
1995-1997		NCHS conducts Phase 2 and 3 development of ICD-10-CM. Phase 3 included further enhancements based on public comments	NCHS	
1997		NCHS posts draft ICD-10-CM Tabular List and crosswalks for 3 month open public comment period	NCHS	
1997 April 15-16, 1997		The Subcommittee convened hearings on initial candidates for adoption of medical code sets under HIPAA. Thirty-one organizations provided testimony. Testimony obtained during the April 1997 hearings acknowledged the need to move to newer versions of the ICD-9-CM at a later time, but recommended that the initial HIPAA code sets be those currently in use.	NCVHS	

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1999		U.S. implements ICD-10 for death (mortality) reporting.	NCHS	<ul style="list-style-type: none"> <li>• <a href="#">International Classification of Diseases - 10th Revision (ICD-10 brochure)</a>[PDF - 209 KB]</li> <li>• <a href="#">A Guide to State Implementation of ICD-10 for Mortality, Part I</a></li> <li>• <a href="#">A Guide to State Implementation of ICD-10 for Mortality, Part II: Applying Comparability Ratios</a> [PDF - 374 KB]</li> <li>• <a href="#">Comparability</a></li> <li>• Data tables <ul style="list-style-type: none"> <li>○ <a href="#">Data using ICD-10</a></li> </ul> </li> <li>• Special Analysis Tables of 1979-98 Data Using an 113 Cause List <ul style="list-style-type: none"> <li>○ <a href="#">Deaths</a></li> <li>○ <a href="#">Death Rates</a></li> <li>○ <a href="#">Age-adjusted Death Rates</a></li> </ul> </li> <li>• <a href="#">History of the Statistical Classification of Diseases and Causes of Death</a> [PDF - 2 MB]. 71 pp.</li> </ul>
1999		An overview of the comments received during the ICD-10-CM comment period were posted on the NCHS website in 1999. A summary of the comments was also presented at the November 1999 ICD-9-CM Coordination and Maintenance Committee meeting and posted on NCHS website.	NCHS	
2000	Rule-making	Publication of NPRMs, Final rules, interim final in FRN	HHS	1998 2000 2003 2009 2012 2014 <a href="https://www.federalregister.gov/documents/2000/08/17/00-20820/health-insurance-reform-standards-for-electronic-transactions">https://www.federalregister.gov/documents/2000/08/17/00-20820/health-insurance-reform-standards-for-electronic-transactions</a>

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2002 May		Prelease version of ICD-10-CM posted on NCHS website		
2002 (May 29, 2002)	NCVHS hearings	<p>Subcommittee convened hearing on ICD-10-CM. Several organizations provided testimony to the NCVHS regarding migration to ICD-10-CM: American Academy of Neurology [AAN], American Academy of Obstetricians and Gynecologists [ACOG], American Psychiatric Association [APA], McKesson Information Systems, AHA, AHIMA, Federation of American Hospital (FAH), Johns Hopkins Bloomberg School of Public Health – Center for Injury Research and Policy, and NACHRI, NCHS, American Academy of Procedural Coders, McKesson Corp. With the exception of Blue Cross Blue Shield Association, testifiers supported migration to ICD-10-CM from ICD-9-CM. Blue Cross Blue Shield Association submitted written testimony urging the Subcommittee to wait until the industry has successfully implemented the initial HIPAA standards and that NCVHS thoroughly evaluate the impact of migration to ICD-10 on all aspects of the industry by assembling a multi-disciplinary team to provide input before making a recommendation to the Secretary.</p> <p>A second panel, comprised of IT representatives from three vendors and 2 health care systems provided testimony regarding system issues related to transitions to new code sets. Several of the presenters have had experience in migration to ICD-10 in other countries. View was that migration was a challenge but could be accomplished as long as there was sufficient lead time (2-3 years) to make systems changes.</p>	NCVHS	
2003	DSMO	NCHS submitted DSMO Change Request (CR) to modify to modify X12N and NUBC to accommodate ICD-10-CM and ICD-10-PCS code sets. Changes were necessary prior to implementation of code sets in administrative and financial transactions.	NCHS	
2003	Cost Study	Cost and Benefits of Moving to ICD-10 Code Sets. Contract awarded to RAND in January 2003. May 2003 RAND presented study plan and preliminary results at May and August 2003 meetings of the Subcommittee.	NCVHS	<a href="https://www.rand.org/pubs/technical_reports/TR132.html">https://www.rand.org/pubs/technical_reports/TR132.html</a>

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		September 2003, RAND presents final results of cost benefit analysis.		
2003 (June-July 2003)	Pilot test	AHIMA/AHA jointly conduct pilot test of ICD-10-CM	AHA/AHIMA	<a href="http://library.ahima.org/doc?oid=61292#.XQFo0YhKhPY">http://library.ahima.org/doc?oid=61292#.XQFo0YhKhPY</a>
2003 November	NCVHS Recommendations to HHS		NCVHS	<p>Recommendations <a href="https://ncvhs.hhs.gov/rrp/november-5-2003-letter-to-the-secretary-icd-10-recommendations/">https://ncvhs.hhs.gov/rrp/november-5-2003-letter-to-the-secretary-icd-10-recommendations/</a>  Attachment 1 Development of ICD-10-CM and ICD-10-PCS  <a href="https://ncvhs.hhs.gov/rrp/november-5-2003-letter-to-the-secretary-icd-10-recommendations-attachment-i/">https://ncvhs.hhs.gov/rrp/november-5-2003-letter-to-the-secretary-icd-10-recommendations-attachment-i/</a></p> <p>Attachment 2 Hearings timeline  <a href="https://ncvhs.hhs.gov/rrp/november-5-2003-letter-to-the-secretary-icd-10-recommendations-attachment-ii/">https://ncvhs.hhs.gov/rrp/november-5-2003-letter-to-the-secretary-icd-10-recommendations-attachment-ii/</a></p> <p>Attachment 3 - Organizations providing comment (1997-2003) <a href="https://ncvhs.hhs.gov/rrp/november-5-2003-letter-to-the-secretary-icd-10-recommendations-attachment-iii/">https://ncvhs.hhs.gov/rrp/november-5-2003-letter-to-the-secretary-icd-10-recommendations-attachment-iii/</a></p>
2008	Rule-making	NPRM published	HHS	
2008			NCVHS	<a href="https://ncvhs.hhs.gov/transcripts-minutes/transcript-of-the-february-21-2008-full-committee-meeting/">https://ncvhs.hhs.gov/transcripts-minutes/transcript-of-the-february-21-2008-full-committee-meeting/</a>  <a href="https://ncvhs.hhs.gov/wp-content/uploads/2014/05/120620p39.pdf">https://ncvhs.hhs.gov/wp-content/uploads/2014/05/120620p39.pdf</a>  <a href="https://ncvhs.hhs.gov/transcripts-minutes/transcript-of-the-november-19-2008-ncvhs-full-committee-meeting/">https://ncvhs.hhs.gov/transcripts-minutes/transcript-of-the-november-19-2008-ncvhs-full-committee-meeting/</a>
2009		Transcript of the December 10, 2009 NCVHS Subcommittee on Standards Hearing	NCVHS	<a href="https://ncvhs.hhs.gov/transcripts-minutes/transcript-of-the-december-10-2009-ncvhs-subcommittee-on-standards-hearing/">https://ncvhs.hhs.gov/transcripts-minutes/transcript-of-the-december-10-2009-ncvhs-subcommittee-on-standards-hearing/</a>
2009	Rule-making	HHS published Final Rule (January 16, 2009)	HHS	HHS required HIPAA-covered entities to transition from ICD-9 to ICD-10 codes for medical diagnosis and inpatient hospital procedures on October 1, 2013 (after two delays, ICD-10 became effective October 1, 2015).

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2010 March 3, 2010	NCVHS Recommendations to HHS	Letter to the Secretary - Implementation of updated versions of the HIPAA Transaction standards and ICD-10	NCVHS	<a href="https://ncvhs.hhs.gov/trp/march-3-2010-letter-to-the-secretary-implementation-of-updated-versions-of-the-hipaa-transaction-standards-and-icd-10/">https://ncvhs.hhs.gov/trp/march-3-2010-letter-to-the-secretary-implementation-of-updated-versions-of-the-hipaa-transaction-standards-and-icd-10/</a>
2010	Rule-making	ICD Coordination and Maintenance Committee (C&M) tasked by HHS to receive stakeholder input regarding crosswalk between 9th and 10th Revisions (posted on CMS website).  Approximately 5200 GEMs entries were the subject of public comment	HHS/PPACA September 2010	September 15, 2010 General Equivalence Maps (GEMs)* <ul style="list-style-type: none"> <li>*Section 10109(c) of the Patient Protection and Affordable Care Act and the Reconciliation Act of 2010 (PPACA) requires the Secretary of Health and Human Services (HHS) to task the C&amp;M Committee to convene a meeting before January 1, 2011, to receive stakeholder input regarding the crosswalk between the Ninth and Tenth Revisions of the International Classification of Diseases (ICD-9, and ICD-10, respectively), posted to the CMS website at <a href="http://www.cms.gov/ICD10">http://www.cms.gov/ICD10</a>, for the purpose of making appropriate revisions to said crosswalk. Section 10109(c) further states that any revised crosswalk be treated as a code set for which a standard has been adopted by the Secretary, and that revisions to this crosswalk be posted to the CMS website.</li> </ul>
2011 September 22, 2011	NCVHS Recommendations to HHS	Observations and Recommendations on the Transition to the Net Version of HIPAA Standards (Versions 5010, D.0.3.0) and the ICD-10 Code Sets.	NCVHS	<a href="https://ncvhs.hhs.gov/wp-content/uploads/2014/05/110922lt1.pdf">https://ncvhs.hhs.gov/wp-content/uploads/2014/05/110922lt1.pdf</a>
2011	Rule-making	HHS Updated medical loss ratio requirements under ACA to help payers cover costs of ICD-10 transition (December 7, 2011).	HHS	
2012	NCVHS meeting		<a href="https://ncvhs.hhs.gov/transcripts-minutes/transcript-of-the-june-20-2012-ncvhs-subcommittee-on-standards-hearing/">https://ncvhs.hhs.gov/transcripts-minutes/transcript-of-the-june-20-2012-ncvhs-subcommittee-on-standards-hearing/</a>	<a href="https://ncvhs.hhs.gov/transcripts-minutes/transcript-of-the-june-20-2012-ncvhs-subcommittee-on-standards-hearing/">https://ncvhs.hhs.gov/transcripts-minutes/transcript-of-the-june-20-2012-ncvhs-subcommittee-on-standards-hearing/</a>

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2012	Rule-making	NPRM published	HHS	
2012	Rule-making	Final Rule published	HHS	
2012 March 2, 2012	NCVHS Recommendations to HHS	Letter to the Secretary - NCVHS recommendation regarding the deadline for implementation of the ICD-10 Code Sets	NCVHS	<a href="https://ncvhs.hhs.gov/wp-content/uploads/2014/05/110922lt1.pdf">https://ncvhs.hhs.gov/wp-content/uploads/2014/05/110922lt1.pdf</a>
2013 April - July 2013	Testing	National Testing Pilot	HIMSS/WEDI	
2013	Testing	ICD-10 National Testing Pilot	Industry consultant group: Lott QA Group	
2013 June			NCVHS	<a href="#">Transcript of the June 18, 2013 NCVHS Subcommittee on Standards</a>
2013 September		Re: Findings from the June 2013 NCVHS Hearing on Current State of Administrative Simplification Standards, Code Sets and Operating Rules	NCHS	<a href="https://ncvhs.hhs.gov/wp-content/uploads/2014/05/130920lt.pdf">https://ncvhs.hhs.gov/wp-content/uploads/2014/05/130920lt.pdf</a>
2012		NCHS establishes ICD-10-CM/PCS webpage focusing on transition for Public Health entities. Information includes: code set background; impact on public health entities; transition planning; resources; training; and FAQs. NCHS/CDC activities included presentations to public health organizations such as Association on State and Territorial Health Officials, ISDS and CDC programs that use ICD-9-CM coded data in program/surveillance activities.	NCHS	<a href="https://www.cdc.gov/nchs/icd/icd10cm_pcs.ht">https://www.cdc.gov/nchs/icd/icd10cm_pcs.ht</a>
2014 Feb. 2014		Hearing on HIPAA, ACA Administrative Simplification	NCVHS	<a href="https://ncvhs.hhs.gov/transcripts-minutes/transcript-of-the-february-19-2014-ncvhs-subcommittee-on-standards-hearing/">https://ncvhs.hhs.gov/transcripts-minutes/transcript-of-the-february-19-2014-ncvhs-subcommittee-on-standards-hearing/</a>
2014	Rule-making	HHS implemented PAMA, changing the ICD-10 compliance date from October 1, 2014 to October 1, 2015.	HHS	
2014		ANSI X12N 5010 implemented; this version accommodates the ICD-10-CM and ICD-10-PCS alphanumeric 7 character code structure.	ANSI X12	



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2014 May 15, 2014		NCVHS letter to the Secretary on ICD-10 Delay	NCVHS	<a href="https://ncvhs.hhs.gov/wp-content/uploads/2014/05/140515lt3.pdf">https://ncvhs.hhs.gov/wp-content/uploads/2014/05/140515lt3.pdf</a>
2015 Jan. 26 -Feb. 3		End-to-end Testing (Round 1)	CMS	<a href="http://www.cms.gov/Medicare/Coding/ICD10/Downloads/2015-Jan-End-to-End-Testing.pdf">http://www.cms.gov/Medicare/Coding/ICD10/Downloads/2015-Jan-End-to-End-Testing.pdf</a>
2015 April 27 - May 1		End-to-End Testing (Round 2)	CMS	
2015 July 20 -July 24		End-to-end Testing (Round 3)	CMS	
2015-2018		NCVHS continues ongoing monitoring of ICD-10 code set implementation and developments in WHO finalization of ICD-11.	NCVHS	
2018 Nov. 26		Article published "Evaluation of Transition From ICD-9-CM to ICD-10-CM Diagnosis Coding System in the National Ambulatory Medical Care Survey	NCHS	<a href="https://www.cdc.gov/nchs/data/nhsr/nhsr120-508.pdf">https://www.cdc.gov/nchs/data/nhsr/nhsr120-508.pdf</a>

## ICD-10-PCS Major Milestones

**May 27, 2019**

The clinical modification of ICD-9 (ICD-9-CM, Volumes 1 and 2) was adopted in the United States in 1979 for morbidity applications, at the same time that ICD-9 (published by WHO) was adopted for mortality data. In addition to its use in health care records and surveys, ICD-9-CM is used to classify diseases and health conditions on health care claims and is the basis for prospective payment to hospitals, other health care facilities and health care providers.

The U.S. also developed its own procedure coding system (ICD-9-CM, Volume 3) for inpatient hospital services in the late 1970's to use with ICD-9-CM, Volumes 1 and 2 for diagnoses; this was necessary because the WHO had not produced a procedure coding system. Since 1979, procedures performed in hospitals have been coded for hospital statistics and on hospital claims, using ICD-9-CM, Vol. 3. The Current Procedural Terminology (CPT-4), developed and maintained by the American Medical Association, is used in the United States to code professional services on claims of physicians and other non-inpatient providers. All users code diagnoses with ICD-9-CM, Volumes 1 and 2. When the inpatient prospective payment system was implemented in 1983, ICD-9-CM, Volumes 1, 2 and 3 was used as the basis for assigning cases to the DRGs. All diagnostic and procedural information was captured using ICD-9-CM. Because there had been radical changes and advances in health care since the implementation of ICD-9-CM, there quickly arose a need to update and revise the system. This was particularly true for the procedure codes of the system, but users also wanted to update the diagnosis portion to obtain greater clinical detail. Thus, an annual updating process was established through the ICD-9-CM Coordination and Maintenance Committee. Although this process continues to allow some addition of new conditions and procedures, and expansion for greater detail, it uses as its base a classification system that was developed nearly 30 years ago.

The following timeline details the development of the ICD-10 Procedure Coding System (ICD-10-PCS) by the Centers for Medicare and Medicaid Services to replace Volume 3 of ICD-9-CM.

The timeline below details the development of the ICD-10-PCS by the Centers for Medicare and Medicaid Services to replace Volume 3 of ICD-9-CM. This timeline updates and expands upon the 1997-2003 timeline originally included with the November 2003 NCVHS letter to the Secretary recommending the adoption of ICD-10-PCS as a HIPAA standard to replace ICD-9-CM procedure codes.

<b>Year</b>	<b>Activity</b>	<b>Description</b>	<b>Initiator</b>	<b>Website Links to Documents, Recommendations and Reports</b>
1986		May 1986, a meeting was convened by HCFA to open discussion among people interested in procedure coding. As a result of that meeting, AHA and AMA agreed to co-chair a task force that would outline and set priorities for the objectives of a common procedure coding system. This task force was charged to undertake a thorough evaluation of the purpose and scope of Volume 3 of ICD-9-CM and	CMS (formerly HCFA)	

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		CPT to evaluate the feasibility of developing a new procedure coding system to achieve the objectives of a common system.		
1990		<p>Earlier review efforts uncovered structural problems in both Volume 3 of ICD-9-CM and CPT. Concern for data quality issues and the cost of submitting data in more than one classification is significant. The feasibility of creating a single procedure coding system that will satisfy all users is as yet unknown. The AMA sponsored a study to investigate the costs and benefit of a single system for physician payment. The study conducted by Coopers and Lybrand, compared two alternatives: 1) a major restructuring of CPT to serve uses beyond physician offices; and 2) a replacement of both Volume 3 of ICD-9-CM and CPT. The results of the AMA study showed that the costs of a replacement system were significant and that the identification of benefits was difficult, thus the consultants concluded that a replacement system, for measuring physician services, was not justified.</p> <p>HCFA awarded a contract for a pilot project that would review the cardiovascular procedures in all of the procedure coding systems (CPT, HCPCS, local HCPCS and Volume 3 of ICD-9-CM), standardize the nomenclature with definitions, recommend a standard format amenable to updating and expansion, and develop a cardiovascular chapter for ICD-9-CM, Volume 3.</p>		
1990		<p>The Subcommittee on Medical Classification Systems of NCVHS (established in 1987) reviewed chapter proposals from the WHO and preliminary international implementation plans for the 10<sup>th</sup> revision of the International Classification of Diseases. The NCVHS noted that while ICD-9-CM has been responsive to the changing technologies and identifying new diseases that impact heavily on the community, there is concern that the ICD classification system may be stressed to a point where the quality of the system may soon be compromised (NCVHS 1990 Annual Report, page 17).</p> <p>The November 1990 Report of the National Committee on Vital and Health Statistics Concerning Issues Relating to the Coding and Classification Systems concluded the following:</p> <ul style="list-style-type: none"> <li>• The Subcommittee review found structural problems with both CPT-4 and Volume 3 of ICD-9-CM.</li> <li>• An ongoing study and evaluation of the feasibility of a uniform procedure code set? is necessary. Such an evaluation should</li> </ul>	NCVHS	<p>NCVHS Annual Report, 1990  <a href="https://www.cdc.gov/nchs/data/ncvhs/nchvs90.pdf">https://www.cdc.gov/nchs/data/ncvhs/nchvs90.pdf</a></p>

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		address HCFA's responsibility as a catalyst in determining the efficacy of a single procedure code set.		
1991		HCFA funded a continuation of the pilot project for the development of a revision of the respiratory system chapter consistent with the approach, design and format of the cardiovascular chapter. The project focuses on the respiratory chapter.	CMS	
1993		<p>The Subcommittee continued to address issues related to the International Classification of Diseases, 10<sup>th</sup> revision, focusing on the status and implementation of ICD-10 in the United States, with particular regard to morbidity applications. The Subcommittee initiated a letter from the NCVHS to the Assistant Secretary for Health and Administrator of the Health Care Financing Administration (HCFA) recommending that the Department dedicate resources to determine the feasibility of implementing ICD-10 for morbidity application in the United States.</p> <p>During 1993, the Subcommittee held three meetings and three working sessions dedicating a substantial portion of the meetings to developing and reviewing its report to recommend that steps be taken to create a single procedure classification system for multiple purposes in the United States.</p> <p>The NCVHS issued a report on desirability of a single procedure coding system containing the following conclusions:</p> <ul style="list-style-type: none"> <li>• The single procedure classification system should possess utility as a statistical classification and an administrative tool. Characteristics of such a system are defined.</li> <li>• General resistance to altering existing systems except where changes are considered necessary to reflect current medical trends</li> <li>• Current systems are badly in need of overhaul and consolidation</li> <li>• Pressures for change derive not only from end users who must contend with deficiencies of current systems, but also from political forces that must address major health care reform. The Committee notes that data sets currently do not permit the ability to track patients through the system as they enter and leave various care settings over the course of an illness or over a long period of time.</li> </ul>	NCVHS	<a href="https://www.cdc.gov/nchs/data/ncvhs/nchvs93.pdf">https://www.cdc.gov/nchs/data/ncvhs/nchvs93.pdf</a>

Year	Activity	Description	Initiator	Website Links to Documents, Recommendations and Reports
		<ul style="list-style-type: none"> <li>The Committee realizes that recognition of the necessity for the development and implementation of a single procedure classification system is only the first step in a difficult and time-consuming process. Public and private sector resources will be required to achieve a successful and timely solution to the issues addressed in the report.</li> </ul> <p>Commonly cited flaws of ICD-9-CM and CPT-4 procedure classification systems were also included in the report</p>		
1993 November			NCVHS	<p>NCVHS Recommendations for a Single Procedure Classification System, November 1993  An Outline of the Characteristics of a Procedure Classification System  NCVHS  <a href="https://www.cdc.gov/nchs/data/ncvhs/nchvs93.pdf">https://www.cdc.gov/nchs/data/ncvhs/nchvs93.pdf</a>  Appendix V. page 54</p>
1994		<p>HCFA announced plans to initiate a solicitation for a contract to develop a new procedure coding system for use with hospital inpatients to replace Volume 3 of ICD-9-CM. The new system is referred to as ICD-10-PCS.</p>	CMS	
1995		<p><u>March 1995</u>  HCFA awarded a contract to 3M HIS to develop the procedure classification to replace Volume 3 of ICD-9-CM (hospital inpatient procedures). The contract is based on the prototype 7-digit alphanumeric procedure classification system developed by 3M HIS in previous contracts. Primary objective is developing a new procedure coding system to replace the current Volume 3 of ICD-9-CM; the project's additional objectives are to improve the accuracy and efficiency of coding, to reduce training efforts, to improve communications with physicians, and to be compatible with the current billing infrastructure.</p> <p>ICD-10-PCS was developed using an open process. A Technical Advisory Panel provided review and comments throughout development. The TAP included American Health Information Management Association (Sue Prophet), American Hospital Association (Nelly Leon-Chisen), American Medical Association (Barry Eisenberg), CPRI/ANSI-HISSP (Dr. Simon Cohn), American Association of Medical Transcription (Claudia Tessier), NIH/NLM</p>	CMS	

Year	Activity	Description	Initiator	Website Links to Documents, Recommendations and Reports
		(Betsy Humphreys), AHCPH (Michael Fitzmaurice), state health system representative (Kevin Ray), hospital information (Laura Green), NCHS (Donna Pickett), ProPAC (Julian Pettingil), Dr. Clement McDonald, American College of Surgeons (Dr. George Spaulding), United HealthCare (James Cross and Philip Bryson), and the National Association of Children's Hospitals and Related Institutions (John Muldoon). ICD-10-PCS was sent to approximately 30 specialty groups for their review and comments. Additionally, HCFA also provided an onsite presentation at the AMA to more than 20 specialty groups.		
1996		A training program was developed, and informal testing and training were conducted. AHIMA national conventions trained 65 coders in two half-day sessions. Another 70 volunteered to test the system, but weren't at the training. The coders received 400 records that were coded with ICD-10-PCS during next 3 months (received by January 1997).	CMS	
1997		Clinical Data Abstraction Centers (CDACs) conducted formal testing of ICD-10-PCS. HCFA trained CDACs (5/14-15/97) with follow-up training after the CDACs informally coded 30 records (6/3/97). Final training session 6/18/97 where CDACs tested system on 5,000 medical records (2500 per CDAC) identifying cases with a wide distribution of ICD-9-CM procedure codes.	CMS	
1997 April 15-16, 1997		The Subcommittee convened hearings on initial candidates for adoption of medical code sets under HIPAA. Thirty-one organizations provided testimony. Testimony obtained during the April 1997 hearings acknowledged the need to move to newer versions of the ICD-9-CM at a later time, but recommended that the initial HIPAA code sets be those currently in use.	NCVHS	
1998		Additional formal testing of ICD-10-PCS using ambulatory records conducted 10/98 – 2/99.  582 ambulatory records obtained by CDACs. 369 records of the 582 had procedures that were tested using ICD-10-PCS and reported as part of the 3/99 on findings. CMS was not able to obtain obstetrics records. CMS also tested ICD-10-PCS on a list of problem cases from the Editorial Advisory Board for Coding Clinic for ICD-9-CM submitted by AHA.	CMS	

Year	Activity	Description	Initiator	Website Links to Documents, Recommendations and Reports
		<p><u>Spring 1998</u> Final draft version of ICD-10-PCS, training material and crosswalk to ICD-9-CM procedure codes posted on CMS website released spring 1998. The CMS written testimony on April 9, 2002 states that CMS has already awarded a contract to 3M to undertake any DRG conversion activities that would be required should ICD-10-PCS be named as a national standard. Information on a conversion and ICD-10-PCS's incorporation into the DRG system would be made available as part of the annual inpatient prospective payment system proposed and final rule process.</p>		
2000	Rule-making	Publication of NPRMs, Final rules, interim final in FRN	HHS	1998 2000 2003 2009 2012 2014 <a href="https://www.federalregister.gov/documents/2000/08/17/00-20820/health-insurance-reform-standards-for-electronic-transactions">https://www.federalregister.gov/documents/2000/08/17/00-20820/health-insurance-reform-standards-for-electronic-transactions</a>
2002 (May 29, 2002)		<p>Subcommittee convened hearing on ICD-10-CM. Several organizations provided testimony to the NCVHS regarding migration to ICD-10-CM: American Academy of Neurology [AAN], American Academy of Obstetricians and Gynecologists [ACOG], American Psychiatric Association [APA], McKesson Information Systems, AHA, AHIMA, Federation of American Hospital (FAH), Johns Hopkins Bloomberg School of Public Health – Center for Injury Research and Policy, and NACHRI, NCHS, American Academy of Procedural Coders, McKesson Corp. With the exception of Blue Cross Blue Shield Association, testifiers supported migration to ICD-10-CM from ICD-9-CM. Blue Cross Blue Shield Association submitted written testimony urging the Subcommittee to wait until the industry has successfully implemented the initial HIPAA standards and that NCVHS thoroughly evaluate the impact of migration to ICD-10 on all aspects of the industry by assembling a multi-disciplinary team to provide input before making a recommendation to the Secretary.</p> <p>A second panel, comprised of IT representatives from three vendors and 2 health care systems provided testimony regarding system issues related to transitions to new code sets. Several of the presenters have had experience in migration to ICD-10 in other countries. View was that migration was a challenge but could be</p>	NCVHS	

Year	Activity	Description	Initiator	Website Links to Documents, Recommendations and Reports
		accomplished as long as there was sufficient lead time (2-3 years) to make systems changes.		
2003	DSMO	NCHS submitted DSMO Change Request (CR) to modify X12N and NUBC to accommodate ICD-10-CM and ICD-10-PCS code sets. Changes were necessary prior to implementation of code sets in administrative and financial transactions	NCHS	
2003	Cost Study	Cost and Benefits of Moving to ICD-10 Code Sets. Contract awarded to RAND in January 2003. May 2003 RAND presented study plan and preliminary results at May and August 2003 meetings of the Subcommittee. September 2003, RAND presents final results of cost benefit analysis.	NCVHS	<a href="https://www.rand.org/pubs/technical_reports/TR132.html">https://www.rand.org/pubs/technical_reports/TR132.html</a>
2003 November			NCVHS	<p>Recommendations  <a href="https://ncvhs.hhs.gov/rrp/november-5-2003-letter-to-the-secretary-icd-10-recommendations/">https://ncvhs.hhs.gov/rrp/november-5-2003-letter-to-the-secretary-icd-10-recommendations/</a>  Attachment 1 Development of ICD-10-CM and ICD-10-PCS  <a href="https://ncvhs.hhs.gov/rrp/november-5-2003-letter-to-the-secretary-icd-10-recommendations-attachment-i/">https://ncvhs.hhs.gov/rrp/november-5-2003-letter-to-the-secretary-icd-10-recommendations-attachment-i/</a></p> <p>Attachment 2 Hearings timeline  <a href="https://ncvhs.hhs.gov/rrp/november-5-2003-letter-to-the-secretary-icd-10-recommendations-attachment-ii/">https://ncvhs.hhs.gov/rrp/november-5-2003-letter-to-the-secretary-icd-10-recommendations-attachment-ii/</a></p> <p>Attachment 3 - Organizations providing comment (1997-2003) <a href="https://ncvhs.hhs.gov/rrp/november-5-2003-letter-to-the-secretary-icd-10-recommendations-attachment-iii/">https://ncvhs.hhs.gov/rrp/november-5-2003-letter-to-the-secretary-icd-10-recommendations-attachment-iii/</a></p>
2004		Deleted Laboratory section from the classification	CMS	
2005-2006		<ul style="list-style-type: none"> <li>Streamlining necessary because of industry statements against ICD-10 implementation owing to the number of codes</li> <li>Before streamlining: <b>485,709</b> codes</li> <li>After streamlining: <b>87,695</b> codes</li> <li>Bulk of numbers reduction came from deleting detail in ancillary sections</li> </ul>		



Year	Activity	Description	Initiator	Website Links to Documents, Recommendations and Reports
		<ul style="list-style-type: none"> <li>• Deleted detail from whole axes of classification (leaving the axis unused) in all ancillary sections: <ul style="list-style-type: none"> <li>○ B Imaging</li> <li>○ C Nuclear Medicine</li> <li>○ D Radiation Oncology</li> <li>○ F Physical Rehabilitation and Diagnostic Audiology</li> <li>○ G Mental Health</li> <li>○ H Substance Abuse Treatment</li> </ul> </li> <li>• <b>Example:</b> Deleted detail from Radiation Oncology seventh character axis of classification, which specified “risk sites”</li> <li>• Reduction in total number of codes from <b>335,190 to 6,218</b></li> </ul>		
2006		<ul style="list-style-type: none"> <li>• Selective reduction of detail in body part, approach and qualifier values</li> <li>• Drastic reduction of device detail available in root operations Insertion, Removal, Revision</li> <li>• Global reduction of approach detail <ul style="list-style-type: none"> <li>○ Approaches deleted from the classification:</li> </ul> </li> <li>• 0 Open</li> <li>• <del>1 Open Intraluminal</del></li> <li>• <del>2 Open Intraluminal Endoscopic</del></li> <li>• 3 Percutaneous</li> <li>• 4 Percutaneous Endoscopic</li> <li>• <del>5 Percutaneous Intraluminal</del></li> <li>• <del>6 Percutaneous Intraluminal Endoscopic</del></li> <li>• 7 Transorifice Intraluminal</li> <li>• 8 Transorifice Intraluminal Endoscopic</li> </ul> <p>Reduction in total number of codes from <b>150,519 to 81,477</b></p>		
2008		NPRM published	HHS	<a href="https://www.govinfo.gov/content/pkg/FR-2008-08-22/pdf/E8-19298.pdf">https://www.govinfo.gov/content/pkg/FR-2008-08-22/pdf/E8-19298.pdf</a>
2008			NCVHS	<a href="https://ncvhs.hhs.gov/transcripts-minutes/transcript-of-the-february-21-2008-full-committee-meeting/">https://ncvhs.hhs.gov/transcripts-minutes/transcript-of-the-february-21-2008-full-committee-meeting/</a>

Year	Activity	Description	Initiator	Website Links to Documents, Recommendations and Reports
				<a href="https://ncvhs.hhs.gov/wp-content/uploads/2014/05/120620p39.pdf">https://ncvhs.hhs.gov/wp-content/uploads/2014/05/120620p39.pdf</a>  <a href="https://ncvhs.hhs.gov/transcripts-minutes/transcript-of-the-november-19-2008-ncvhs-full-committee-meeting/">https://ncvhs.hhs.gov/transcripts-minutes/transcript-of-the-november-19-2008-ncvhs-full-committee-meeting/</a>
2009		Transcript of the December 10, 2009 NCVHS Subcommittee on Standards Hearing	NCVHS	<a href="https://ncvhs.hhs.gov/transcripts-minutes/transcript-of-the-december-10-2009-ncvhs-subcommittee-on-standards-hearing/">https://ncvhs.hhs.gov/transcripts-minutes/transcript-of-the-december-10-2009-ncvhs-subcommittee-on-standards-hearing/</a>
2009	Rule-making	HHS published Final Rule (January 16, 2009)	HHS	HHS required HIPAA-covered entities to transition from ICD-9 to ICD-10 codes for medical diagnosis and inpatient hospital procedures on October 1, 2013 (after two delays, ICD-10 became effective October 1, 2015). <a href="https://www.govinfo.gov/content/pkg/FR-2009-01-16/pdf/E9-743.pdf">https://www.govinfo.gov/content/pkg/FR-2009-01-16/pdf/E9-743.pdf</a>
2010 March 3, 2010		Letter to the Secretary - Implementation of updated versions of the HIPAA Transaction standards and ICD-10	NCVHS	<a href="https://ncvhs.hhs.gov/rrp/march-3-2010-letter-to-the-secretary-implementation-of-updated-versions-of-the-hipaa-transaction-standards-and-icd-10/">https://ncvhs.hhs.gov/rrp/march-3-2010-letter-to-the-secretary-implementation-of-updated-versions-of-the-hipaa-transaction-standards-and-icd-10/</a>
2010	Rule-making	<p>ICD Coordination and Maintenance Committee (C&amp;M) tasked by HHS to receive stakeholder input regarding crosswalk between 9th and 10th Revisions (posted on CMS website).</p> <p>Approximately 5200 GEMs entries were the subject of public comment</p>	HHS/PPACA September 2010	<p><u>September 15, 2010</u> General Equivalence Maps (GEMs)*</p> <ul style="list-style-type: none"> <li>*Section 10109(c) of the Patient Protection and Affordable Care Act and the Reconciliation Act of 2010 (PPACA) requires the Secretary of Health and Human Services (HHS) to task the C&amp;M Committee to convene a meeting before January 1, 2011, to receive stakeholder input regarding the crosswalk between the Ninth and Tenth Revisions of the International Classification of Diseases (ICD-9, and ICD-10, respectively), posted to the CMS website at <a href="http://www.cms.gov/ICD10">http://www.cms.gov/ICD10</a>, for the purpose of making appropriate revisions to said crosswalk. Section 10109(c) further states that any revised crosswalk</li> </ul>

Year	Activity	Description	Initiator	Website Links to Documents, Recommendations and Reports
				be treated as a code set for which a standard has been adopted by the Secretary, and that revisions to this crosswalk be posted to the CMS website.
2011				<a href="https://ncvhs.hhs.gov/page/12/?s=icd-10-cm">https://ncvhs.hhs.gov/page/12/?s=icd-10-cm</a>
2011 September 22, 2011		Observations and Recommendations on the Transition to the Net Version of HIPAA Standards (Versions 5010, D.0.3.0) and the ICD-10 Code Sets	NCVHS	<a href="https://ncvhs.hhs.gov/wp-content/uploads/2014/05/110922lt1.pdf">https://ncvhs.hhs.gov/wp-content/uploads/2014/05/110922lt1.pdf</a>
2011	Rule-making	HHS Updated medical loss ratio requirements under ACA to help payers cover costs of ICD-10 transition (December 7, 2011)	HHS	
2012			<a href="https://ncvhs.hhs.gov/transcripts-minutes/transcript-of-the-march-1-2012-full-committee-meeting/">https://ncvhs.hhs.gov/transcripts-minutes/transcript-of-the-march-1-2012-full-committee-meeting/</a>	<a href="https://ncvhs.hhs.gov/transcripts-minutes/transcript-of-the-june-20-2012-ncvhs-subcommittee-on-standards-hearing/">https://ncvhs.hhs.gov/transcripts-minutes/transcript-of-the-june-20-2012-ncvhs-subcommittee-on-standards-hearing/</a>
2012	Rule-making	NPRM published	HHS	
2012	Rule-making	Final Rule published	HHS	
2012 March 2, 2012		Letter to the Secretary - NCVHS recommendation regarding the deadline for implementation of the ICD-10 Code Sets	NCVHS	<a href="https://ncvhs.hhs.gov/wp-content/uploads/2014/05/110922lt1.pdf">https://ncvhs.hhs.gov/wp-content/uploads/2014/05/110922lt1.pdf</a>
2013 April - July 2013		National Testing Pilot (ICD-10-CM and ICD-10-PCS)	HIMSS/WEDI	
2013		ICD-10 National Testing Pilot	Industry consultant group: the Lott QA Group	
2013 June			NCVHS	<a href="#">Transcript of the June 18, 2013 NCVHS Subcommittee on Standards</a>

Year	Activity	Description	Initiator	Website Links to Documents, Recommendations and Reports
2013 Septem ber		Re: Findings from the June 2013 NCVHS Hearing on Current State of Administrative Simplification Standards, Code Sets and Operating Rules	NCVHS	<a href="https://ncvhs.hhs.gov/wp-content/uploads/2014/05/130920lt.pdf">https://ncvhs.hhs.gov/wp-content/uploads/2014/05/130920lt.pdf</a>
2013		NCHS establishes ICD-10-CM/PCS webpage focusing on transition for Public Health entities. Information includes: code set background; impact on public health entities; transition planning; resources; training; and FAQs. NCHS/CDC activities included presentations to public health organizations such as Association on State and Territorial Health Officials, ISDS and CDC programs that use ICD-9-CM coded data in program/ surveillance activities.	NCHS	<a href="https://www.cdc.gov/nchs/icd/icd10cm_pcs.ht">https://www.cdc.gov/nchs/icd/icd10cm_pcs.ht</a>
2014			NCHS	<a href="https://ncvhs.hhs.gov/transcripts-minutes/transcript-of-the-february-19-2014-ncvhs-subcommittee-on-standards-hearing/">https://ncvhs.hhs.gov/transcripts-minutes/transcript-of-the-february-19-2014-ncvhs-subcommittee-on-standards-hearing/</a>  <a href="https://ncvhs.hhs.gov/wp-content/uploads/2014/05/120620p39.pdf">https://ncvhs.hhs.gov/wp-content/uploads/2014/05/120620p39.pdf</a>
2014	Rule-making	HHS implemented PAMA, changing the ICD-10 compliance date from October 1, 2014 to October 1, 2015.	HHS	
		ANSI X12N 5010 implemented; this version accommodates the ICD-10-CM and ICD-10-PCS alphanumeric 7 character code structure	ANSI X12	
2014 May 15,		NCVHS letter to the Secretary on ICD-10 Delay	NCVHS	<a href="https://ncvhs.hhs.gov/wp-content/uploads/2014/05/140515lt3.pdf">https://ncvhs.hhs.gov/wp-content/uploads/2014/05/140515lt3.pdf</a>
2015 Jan. 26 -Feb. 3		End-to-end Testing (Round 1)	CMS	<a href="http://www.cms.gov/Medicare/Coding/ICD10/Downloads/2015-Jan-End-to-End-Testing.pdf">http://www.cms.gov/Medicare/Coding/ICD10/Downloads/2015-Jan-End-to-End-Testing.pdf</a>
2015 April 27 - May 1		End-to-End Testing (Round 2)	CMS	
2015 July 20 -July 24		End-to-end Testing (Round 3)	CMS	
2015- 2018		NCVHS continues ongoing monitoring of ICD-10 code sets implementation and developments in WHO finalization of ICD-11	NCVHS	

## Appendix I

### NCVHS Recommendations for a Single Procedure Classification System, November 1993 An Outline of the Characteristics of a Procedure Classification System

#### Hierarchical structure

**Ability to aggregate data from individual codes into larger categories**  
**Each code has a unique definition forever – not reused**

#### Expandability

**Flexibility to new procedures and technologies. Mechanism for periodic updating**  
**Code expansion must not disrupt systematic code structure**

#### Comprehensiveness

**Provides NOS and NEC categories so that all possible procedures can be classified somewhere**

#### Non-overlapping

**Each procedure (or component of a procedure) is assigned to only one code**

#### Ease of Use

**Standardization of definitions and terminology**  
**Adequate indexing and annotation for all users**

#### Setting and Provider Neutrality

**Same code regardless of who or where procedure is performed**

#### Multi-axial

**Body system(s) affected**  
**Technology used**

#### Limited to classification of procedures

**Should not include diagnostic information**

**Other data elements (such as age) should be elsewhere in the record**