

Medtronic Coronary and Peripheral Vascular ICD-10 Coding for Physicians



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Topics

- Implementation Background
- ICD-10-CM Diagnosis Codes
- Diagnosis Code Crosswalks
- ICD-10-PCS Procedure Codes
- Implementation Issues
- Appendix : Key Resources
- Questions

Attachment : Diagnosis Code Crosswalks

Implementation Background



Effective Date



A calendar for October 2015. The days of the week are listed at the top: Sun, Mon, Tues, Wed, Thu, Fri, Sat. The dates are arranged in a grid. The number 1 is circled in red, indicating the start of the month. The calendar shows that October 1, 2015, is a Thursday.

October 2015						
Sun	Mon	Tues	Wed	Thu	Fri	Sat
			1	2	3	
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

- ICD-10 goes into effect *October 1, 2015*.
- Use of ICD-10 in the United States was formally proposed in August 2008 and finalized in January 2009.
- Implementation of ICD-10 was initially scheduled for October 2013 and has been postponed twice since then.
- ICD-10 is effective by date of discharge, not by date of admission.
- ICD-10-CM for diagnosis codes and ICD-10-PCS for procedure codes go into effect together on the same date.

Who Uses What

- Physicians, hospitals and all other providers must use ICD-10 *diagnosis* codes.
- Hospitals must also use ICD-10-PCS *procedure* codes for inpatient cases.
- Implementation of ICD-10 does not affect use of CPT®.

Provider	Setting	Diagnoses	Procedures
Physicians	Facility/Office	ICD-10-CM	CPT
Hospitals	Outpatient	ICD-10-CM	CPT
ASCs	Outpatient	ICD-10-CM	CPT
Hospitals	Inpatient	ICD-10-CM	ICD-10-PCS

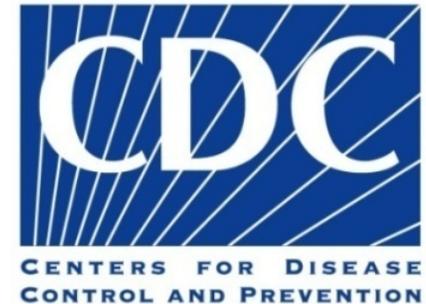
ICD-10-CM Diagnosis Codes



Need an ICD-10-CM Codebook?

ICD-10-CM diagnosis codes are administered by the Centers for Disease Control.

Physician offices can download a copy of the entire ICD-10-CM codebook from the CDC website:

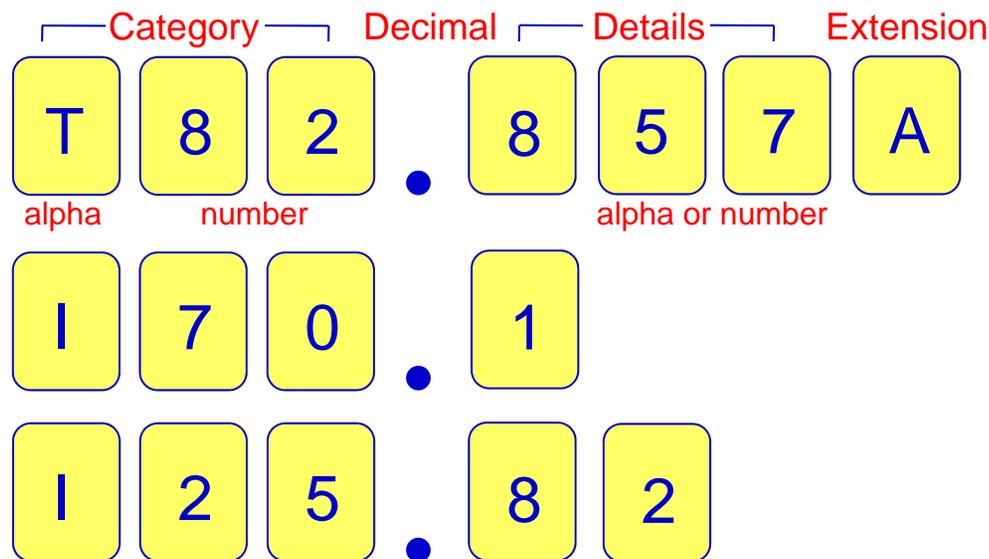


<http://www.cdc.gov/nchs/icd/icd10cm.htm#icd2105>

- This version is official, complete, current, and free.
- Offices will need at least the Tabular and the Index.
- The Tabular is the running list of diagnosis codes with their descriptions and instructions for use.
- The codes are updated once a year on October 1.

Diagnosis Code Structure

- Codes are organized by chapter, mostly by body system. The chapters are virtually identical to those in ICD-9-CM.
- Codes are alpha-numeric and can be 3 to 7 digits long.



T82.8557A

Stenosis of cardiac prosthetic devices, implants and grafts, initial encounter

I70.1

Atherosclerosis of renal artery

I25.82

Chronic total occlusion of coronary artery

Volume of Diagnosis Codes

ICD-10-CM has far more diagnosis codes than ICD-9-CM and provides a greater level of specificity.

ICD-9-CM
14,567 codes
ICD-10-CM
69,823 codes

- Most physicians will use a small subset of the total codes.
- Physicians do not use external cause codes.
- Many of the additional codes are due to laterality.
- Specialty societies have been very active in requesting new diagnosis codes with additional clinical detail.
- There are still ‘unspecified’ codes.

Much of the additional specificity captured by ICD-10-CM diagnosis codes is already documented by physicians.

Greater Specificity

Some conditions that use the same code in ICD-9-CM are differentiated in ICD-10-CM and have separate codes.

Example: Atherosclerosis of native arteries of the extremities with intermittent claudication

ICD-9-CM		ICD-10-CM	
440.21	Atherosclerosis of native arteries of the extremities with intermittent claudication	170.211	Atherosclerosis of native arteries of extremities with intermittent claudication, right leg
		170.212	Atherosclerosis of native arteries of extremities with intermittent claudication, left leg
		170.213	Atherosclerosis of native arteries of extremities with intermittent claudication, bilateral legs
		170.218	Atherosclerosis of native arteries of extremities with intermittent claudication, other extremity
		170.219	Atherosclerosis of native arteries of extremities with intermittent claudication, unspecified extremity

ICD-10 Guidelines

Guidelines for use of ICD-10-CM are offered by multiple sources, but two sources are mandatory:



- ① Instructions within the ICD-10 codebook itself
- ② *The ICD-10 Official Guidelines for Coding and Reporting*
 - ▶ Use of these guidelines is mandated under HIPAA
 - ▶ Physicians only need to use the diagnosis guidelines (there's a separate set of official guidelines for procedures)
 - ▶ The guidelines can be found at:
<http://www.cdc.gov/nchs/icd/icd10cm.htm#icd2105>
 - ▶ Physicians will be most interested in Section IV: Diagnostic Coding

Diagnosis Code Crosswalks



General Equivalence Mappings

CDC posts General Equivalence Mappings (GEMs) on its website. These are a useful tool for going back-and-forth between ICD-9-CM codes and ICD-10 codes.

- The first GEM goes forward from ICD-9 to ICD-10.
- The second GEM goes backward from ICD-10 to ICD-9.
- Both GEMs are updated once a year.
- The GEMs can be found at:

<http://www.cdc.gov/nchs/icd/icd10cm.htm#icd2105>

4400	I700	00000
4401	I701	00000
44020	I70209	10000
44021	I70219	10000
44022	I70229	10000
44023	I7025	10000
44024	I70269	10000
44029	I70299	10000
44030	I70399	10000
44031	I70499	10000
44032	I70599	10000
4404	I7092	00000
4408	I708	10000
4409	I7090	10000
4409	I7091	10000

Although GEMs are useful, CDC and CMS strongly recommend using the ICD-10-CM codebook directly, as studies have consistently indicated that this is most accurate.

Crosswalk: Aortic Aneurysm

Aneurysm of Abdominal Aorta and Thoracic Aorta

ICD-9-CM		ICD-10-CM	
441.2	Thoracic aortic aneurysm without mention of rupture	I71.1	Thoracic aortic aneurysm without rupture
441.4	Abdominal aortic aneurysm without mention of rupture	I71.4	Abdominal aortic aneurysm without rupture
441.7	Thoracoabdominal aortic aneurysm without mention of rupture	I71.6	Thoracoabdominal aortic aneurysm without rupture

10

These codes include both fusiform and saccular aortic aneurysms. Also, ulcer of the aorta is indexed and coded to aneurysm.



Crosswalk: Other Aortic Disorders

Dissection of Thoracic Aorta

ICD-9-CM		ICD-10-CM	
441.01	Dissection of thoracic aorta	I71.01	Dissection of thoracic aorta

Traumatic Injury of Thoracic Aorta

ICD-9-CM		ICD-10-CM	
901.0	Injury to thoracic aorta	S25.01xA	Minor laceration of thoracic aorta
		S25.02xA	Major laceration of thoracic aorta
		S25.09xA	Other specified injury of thoracic aorta

10 A minor laceration is a superficial or incomplete transection of the thoracic aorta. A major laceration is complete transection or traumatic rupture of the thoracic aorta.

10 “x” is a placeholder. These codes are only five digits but extension “A” must always be in the 7th position. So “x” holds the empty 6th position.

Crosswalk: Atherosclerosis of Extremity

ICD-10-CM identifies the same manifestations, while adding specificity on the particular leg or other extremity (arm) involved as well as the site of ulceration.

Native Artery: Unspecified, Intermittent Claudication, Rest Pain

ICD-9-CM		ICD-10-CM	
440.20	Atherosclerosis of native arteries of extremities, unspecified	I70.201	Unspecified atherosclerosis of native arteries of extremities, right leg
		I70.202	Unspecified atherosclerosis of native arteries of extremities, left leg
		I70.203	Unspecified atherosclerosis of native arteries of extremities, bilateral legs
		I70.208	Unspecified atherosclerosis of native arteries of extremities, other extremity
		I70.209	Unspecified atherosclerosis of native arteries of extremities, unspecified extremity
440.21	Atherosclerosis of native arteries of extremities, with intermittent claudication	I70.211	Atherosclerosis, native arteries extremities, with intermittent claudication, right leg
		I70.212	Atherosclerosis, native arteries extremities, with intermittent claudication, left leg
		I70.213	Atherosclerosis, native arteries extremities, w intermittent claudication, bilateral legs
		I70.218	Atherosclerosis, native arteries ext, w intermittent claudication, other extremity
		I70.219	Atherosclerosis, native arteries ext, w intermittent claudication, unspecified extremity
440.22	Atherosclerosis of native arteries of extremities, with rest pain	I70.221	Atherosclerosis, native arteries extremities, with rest pain, right leg
		I70.222	Atherosclerosis, native arteries extremities, with rest pain, left leg
		I70.223	Atherosclerosis, native arteries extremities, with rest pain, bilateral legs
		I70.228	Atherosclerosis, native arteries extremities, with rest pain, other extremity
		I70.229	Atherosclerosis, native arteries extremities, with rest pain, unspecified extremity

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Codes in I70.22 for rest pain also include intermittent claudication if present.

Crosswalk: Atherosclerosis of Extremity

Native Artery: Ulceration

ICD-9-CM		ICD-10-CM	
440.23	Atherosclerosis of native arteries of extremities, with ulceration	I70.231	Atherosclerosis, native arteries of right leg with ulceration of thigh
		I70.232	Atherosclerosis, native arteries of right leg with ulceration of calf
		I70.233	Atherosclerosis, native arteries of right leg with ulceration of ankle
		I70.234	Atherosclerosis, native arteries of right leg with ulceration of heel and midfoot
		I70.235	Atherosclerosis, native arteries of right leg with ulceration of other part of foot
		I70.238	Atherosclerosis, native arteries of right leg with ulceration of other part of lower right leg
		I70.239	Atherosclerosis, native arteries of right leg with ulceration of unspecified site
		I70.241	Atherosclerosis, native arteries of left leg with ulceration of thigh
		I70.242	Atherosclerosis, native arteries of left leg with ulceration of calf
		I70.243	Atherosclerosis, native arteries of left leg with ulceration of ankle
		I70.244	Atherosclerosis, native arteries of left leg with ulceration of heel and midfoot
		I70.245	Atherosclerosis, native arteries of left leg with ulceration of other part of foot
		I70.248	Atherosclerosis, native arteries of left leg with ulceration of other part of lower left leg
		I70.249	Atherosclerosis, native arteries of left leg with ulceration of unspecified site
		I70.25	Atherosclerosis, native arteries of other extremities with ulceration

10 Codes in I70.23, I70.24, and I70.25 for ulceration also include rest pain and intermittent claudication if present.

10 While the codes include the ulcer's location, an additional code is assigned for the ulcer's severity.

Crosswalk: Atherosclerosis of Extremity

Native Artery: Gangrene, Other

ICD-9-CM		ICD-10-CM	
440.24	Atherosclerosis of native arteries of extremities, with gangrene	170.261	Atherosclerosis, native arteries of extremities, with gangrene , right leg
		170.262	Atherosclerosis, native arteries of extremities, with gangrene , left leg
		170.263	Atherosclerosis, native arteries of extremities, with gangrene , bilateral legs
		170.268	Atherosclerosis, native arteries of extremities, with gangrene , other extremity
		170.269	Atherosclerosis, native arteries of extremities, with gangrene , unspecified extremity
440.29	Atherosclerosis of native arteries of extremities, other	170.291	Other atherosclerosis, native arteries of extremities, right leg
		170.292	Other atherosclerosis, native arteries of extremities, left leg
		170.293	Other atherosclerosis, native arteries of extremities, bilateral legs
		170.298	Other atherosclerosis, native arteries of extremities, other extremity
		170.299	Other atherosclerosis, native arteries of extremities, unspecified extremity

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Codes in I70.26 for gangrene also include rest pain, intermittent claudication, and ulceration if present.

Crosswalk: Atherosclerosis of Extremity

Bypass Graft

The three ICD-9-CM codes for atherosclerosis of bypass graft of the extremities convert to 200 codes in ICD-10-CM.

ICD-9-CM		ICD-10-CM	
440.30	Atherosclerosis of unspecified bypass graft of extremities	170.3~~	Atherosclerosis of unspecified type of bypass graft of extremities
440.31	Atherosclerosis of autologous vein bypass graft of extremities	170.4~~	Atherosclerosis of autologous vein bypass graft of extremities
440.32	Atherosclerosis of nonautologous biological bypass graft of extremities	170.5~~	Atherosclerosis of nonautologous biological bypass graft of extremities
		170.6~~	Atherosclerosis of nonbiological bypass graft of extremities
		170.7~~	Atherosclerosis of other type of bypass graft of extremities

The additional codes provide significantly more specificity by identifying:

- nonbiological and other types of bypass grafts
- manifestations (intermittent claudication, rest pain, ulceration, gangrene)
- leg (left, right, bilateral) or other extremity (arm) involved
- site of ulceration if present

Crosswalk: Atherosclerosis of Extremity

Bypass Graft: Unspecified

- These codes are used when atherosclerosis is present in a bypass graft, but the *type* of bypass graft is not documented or not known.

ICD-9-CM		ICD-10-CM		
440.30	Atherosclerosis of unspecified bypass graft of extremities	170.30~	Unspecified atherosclerosis, unspecified type of bypass graft of extremities	1-right leg 2-left leg 3-bilateral legs 8-other extremity 9-unspecified extremity
		170.31~	Atherosclerosis, unspecified type of bypass graft of extremities, with intermittent claudication	
		170.32~	Atherosclerosis, unspecified type of bypass graft of extremities, with rest pain	
		170.33~	Atherosclerosis, unspecified type of bypass graft of right leg, with ulceration	1-thigh 2-calf 3-ankle 4-heel and midfoot 5-other part of foot 8-other part of lower leg 9-unspecified site
		170.34~	Atherosclerosis, unspecified type of bypass graft of left leg, with ulceration	
		170.35	Atherosclerosis, unspecified type of bypass graft of other extremity, with ulceration	
		170.36~	Atherosclerosis, unspecified type of bypass graft of extremities, with gangrene	1-right leg 2-left leg 3-bilateral legs 8-other extremity 9-unspecified extremity
		170.39~	Other atherosclerosis, unspecified type of bypass graft of extremities	

Crosswalk: Atherosclerosis of Extremity

Bypass Graft: Autologous Vein Bypass Graft

- These codes are used when atherosclerosis is present in a bypass graft composed of the patient's own saphenous vein or another vein harvested from the patient's body.

ICD-9-CM		ICD-10-CM		
440.31	Atherosclerosis of autologous vein bypass graft	170.40~	Unspecified atherosclerosis, autologous vein bypass graft of extremities	1-right leg 2-left leg 3-bilateral legs 8-other extremity 9-unspecified extremity
		170.41~	Atherosclerosis, autologous vein bypass graft of extremities, with intermittent claudication	
		170.42~	Atherosclerosis, autologous vein bypass graft of extremities, with rest pain	
		170.43~	Atherosclerosis, autologous vein bypass graft of right leg, with ulceration	1-thigh 2-calf 3-ankle 4-heel and midfoot 5-other part of foot 8-other part of lower leg 9-unspecified site
		170.44~	Atherosclerosis, autologous vein bypass graft of left leg, with ulceration	
		170.45	Atherosclerosis, autologous vein bypass graft of other extremity, with ulceration	
		170.46~	Atherosclerosis, autologous vein bypass graft of extremities, with gangrene	1-right leg 2-left leg 3-bilateral legs 8-other extremity 9-unspecified extremity
		170.49~	Other atherosclerosis, autologous vein bypass graft of extremities	

Crosswalk: Atherosclerosis of Extremity

Bypass Graft: Nonautologous Biological Bypass Graft

- These codes are used when atherosclerosis is present in a bypass graft composed of a cadaveric vessel.

ICD-9-CM		ICD-10-CM		
440.32	Atherosclerosis of nonautologous biological bypass graft	170.50~	Unspecified atherosclerosis, nonautologous biological bypass graft of extremities	1-right leg 2-left leg 3-bilateral legs 8-other extremity 9-unspecified extremity
		170.51~	Atherosclerosis, nonautologous biological bypass graft of extremities, with intermittent claudication	
		170.52~	Atherosclerosis, nonautologous biological bypass graft of extremities, with rest pain	
		170.53~	Atherosclerosis, nonautologous biological bypass graft of right leg, with ulceration	1-thigh 2-calf 3-ankle 4-heel and midfoot 5-other part of foot 8-other part of lower leg 9-unspecified site
		170.54~	Atherosclerosis, nonautologous biological bypass graft of left leg, with ulceration	
		170.55	Atherosclerosis, nonautologous biological bypass graft of other extremity, with ulceration	
		170.56~	Atherosclerosis, nonautologous biological bypass graft of extremities, with gangrene	1-right leg 2-left leg 3-bilateral legs 8-other extremity 9-unspecified extremity
		170.59~	Other atherosclerosis, nonautologous biological bypass graft of extremities	

Crosswalk: Atherosclerosis of Extremity

Bypass Graft: Nonbiological Bypass Graft

- These codes are used when atherosclerosis is present in a bypass graft composed of Gore-Tex or another synthetic material.

ICD-10-CM		
I70.60~	Unspecified atherosclerosis, nonbiological bypass graft of extremities	1-right leg 2-left leg
I70.61~	Atherosclerosis, nonbiological bypass graft of extremities, with intermittent claudication	3-bilateral legs
I70.62~	Atherosclerosis, nonbiological bypass graft of extremities, with rest pain	8-other extremity
		9-unspecified extremity
I70.63~	Atherosclerosis, nonbiological bypass graft of right leg, with ulceration	1-thigh 2-calf 3-ankle
		4-heel and midfoot
I70.64~	Atherosclerosis, nonbiological bypass graft of left leg, with ulceration	5-other part of foot
		8-other part of lower leg
		9-unspecified site
I70.65	Atherosclerosis, nonbiological bypass graft of other extremity, with ulceration	
I70.66~	Atherosclerosis, nonbiological bypass graft of extremities, with gangrene	1-right leg 2-left leg
		3-bilateral legs
I70.69~	Other atherosclerosis, nonbiological bypass graft of extremities	8-other extremity
		9-unspecified extremity

Crosswalk: Atherosclerosis of Extremity

Bypass Graft: Other Type of Bypass Graft

- These codes are used when atherosclerosis is present in a bypass graft whose composition is specified but is not the patient's own vein, a cadaveric vessel, or synthetic material, eg. an autologous artery.

ICD-10-CM		
I70.70~	Unspecified atherosclerosis, other type of bypass graft of extremities	1-right leg 2-left leg
I70.71~	Atherosclerosis, other type of bypass graft of extremities, with intermittent claudication	3-bilateral legs
I70.72~	Atherosclerosis, other type of bypass graft of extremities, with rest pain	8-other extremity 9-unspecified extremity
I70.73~	Atherosclerosis, other type of bypass graft of right leg, with ulceration	1-thigh 2-calf 3-ankle
I70.74~	Atherosclerosis, other type of bypass graft of left leg, with ulceration	4-heel and midfoot 5-other part of foot
I70.75	Atherosclerosis, other type of bypass graft of other extremity, with ulceration	8-other part of lower leg 9-unspecified site
I70.76~	Atherosclerosis, other type of bypass graft of extremities, with gangrene	1-right leg 2-left leg
I70.79~	Other atherosclerosis, other type of bypass graft of extremities	3-bilateral legs 8-other extremity 9-unspecified extremity

- 10** For *all* bypass grafts, codes for rest pain include intermittent claudication, codes for ulceration include rest pain, and codes for gangrene include ulceration.

Crosswalk: Atherosclerosis, Other

CTO of Extremity

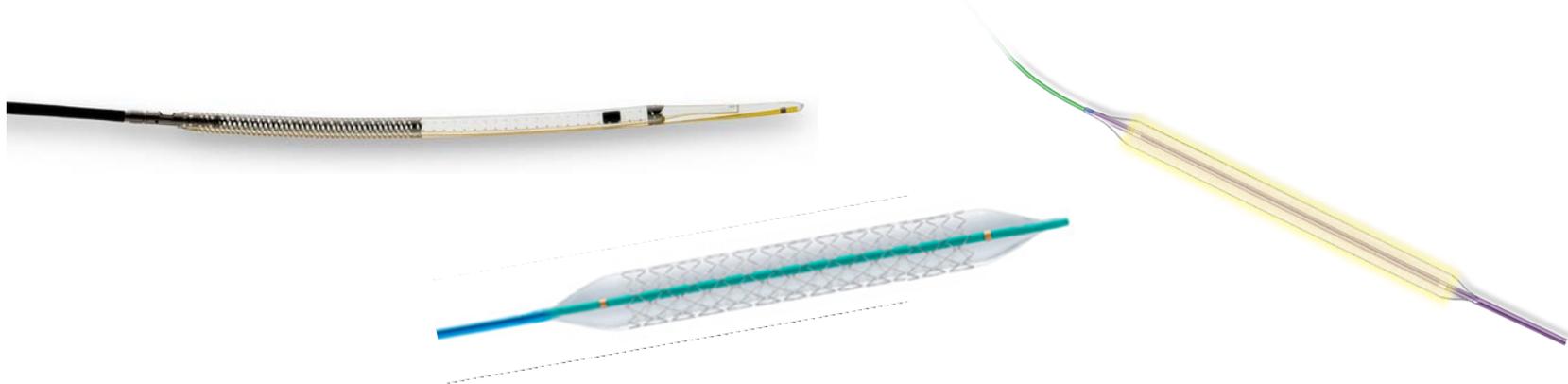
ICD-9-CM		ICD-10-CM	
440.4	Chronic total occlusion of artery of extremities	I70.92	Chronic total occlusion of artery of extremities

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A code for atherosclerosis of the extremities is coded first to identify the site and any manifestations.

Other Sites

ICD-9-CM		ICD-10-CM	
440.1	Atherosclerosis of renal artery	I70.1	Atherosclerosis of renal artery
440.8	Atherosclerosis of other specified arteries	I70.8	Atherosclerosis of other arteries



Crosswalk: PAD and PVD

ICD-9-CM		ICD-10-CM	
443.9	Peripheral vascular disease, unspecified (also used for peripheral arterial disease unspecified)	173.9	Peripheral vascular disease, unspecified (also used for peripheral arterial disease unspecified)



Particularly for encounters involving interventions, documentation should *avoid* the generic terms PVD and PAD.



Physician documentation should *specify*:

- whether atherosclerosis is present in a native vessel or a bypass graft
- the specific type of bypass graft
- manifestations (claudication, rest pain, ulceration, gangrene)
- leg (left, right, bilateral) or other extremity (arm) involved
- precise site of ulceration if present

Crosswalk: CAD and Angina

Angina

ICD-9-CM		ICD-10-CM	
411.1	Intermediate coronary syndrome (unstable angina)	I20.0	Unstable angina
413.0	Angina decubitus	I20.8	Other forms of angina
413.1	Prinzmetal angina	I20.1	Angina pectoris with documented spasm
413.9	Other and unspecified angina	I20.8	Other forms of angina (eg, angina of effort, "slow flow" syndrome)
		I20.9	Angina pectoris, unspecified

10

I20 codes are *not* used if the patient also has coronary artery disease. There are combination codes for angina with CAD.

10

The physician has to document that CAD is present, but does *not* need to document that the angina is due to CAD. A cause-and-effect relationship is assumed.

Crosswalk: CAD and Angina

ICD-10-CM handles coronary artery disease (atherosclerosis) with angina differently from ICD-9-CM, although the same clinical distinctions are preserved.

Coronary Artery Disease: ICD-9-CM

ICD-9-CM	
414.00	Coronary atherosclerosis of unspecified type of vessel, native or graft
414.01	Coronary atherosclerosis of native coronary artery
414.02	Coronary atherosclerosis of autologous vein bypass graft
414.03	Coronary atherosclerosis of nonautologous vein bypass graft
414.04	Coronary atherosclerosis of artery bypass graft
414.05	Coronary atherosclerosis of unspecified type of bypass graft
414.06	Coronary atherosclerosis of native coronary artery of transplanted heart
414.07	Coronary atherosclerosis of bypass graft (artery)(vein) of transplanted heart

Coronary Artery Disease: ICD-10-CM



- Does the patient also have angina?
- What kind of vessel has coronary atherosclerosis?
- What kind of angina?

Crosswalk: CAD and Angina

Coronary Artery Disease: Without Angina

ICD-10-CM	
→ I25.10	Atherosclerotic heart disease of native coronary artery without angina pectoris ←
I25.810	Atherosclerosis of coronary artery bypass graft(s) without angina pectoris
I25.811	Atherosclerosis of native coronary artery of transplanted heart without angina pectoris
I25.812	Atherosclerosis of bypass graft of coronary artery of transplanted heart without angina pectoris

Coronary Artery Disease: With Angina

- Atherosclerotic heart disease of *native* coronary artery with angina

ICD-10-CM	
I25.110	Atherosclerotic heart disease of native coronary artery with unstable angina pectoris
I25.111	Atherosclerotic heart disease of native coronary artery with angina pectoris with documented spasm
I25.118	Atherosclerotic heart disease of native coronary artery with other forms of angina pectoris
→ I25.119	Atherosclerotic heart disease of native coronary artery with unspecified angina pectoris ←

- Atherosclerosis of *coronary artery bypass graft(s)*, unspecified, with angina

I25.700	Atherosclerosis of coronary artery bypass graft(s), unspecified, with <i>unstable</i> angina pectoris
I25.701	Atherosclerosis of coronary artery bypass graft(s), unspecified, with angina pectoris with documented spasm
I25.708	Atherosclerosis of coronary artery bypass graft(s), unspecified, with other forms of angina pectoris
→ I25.709	Atherosclerosis of coronary artery bypass graft(s), unspecified, with unspecified angina pectoris ←

Crosswalk: CAD and Angina

- Atherosclerosis of *autologous vein coronary artery bypass graft(s)* with angina (eg. saphenous vein)

ICD-10-CM	
I25.710	Atherosclerosis of autologous vein coronary artery bypass graft(s), with unstable angina pectoris
I25.711	Atherosclerosis of autologous vein coronary artery bypass graft(s), with angina pectoris with documented spasm
I25.718	Atherosclerosis of autologous vein coronary artery bypass graft(s), with other forms of angina pectoris
I25.719	Atherosclerosis of autologous vein coronary artery bypass graft(s), with unspecified angina pectoris

- Atherosclerosis of *autologous artery coronary artery bypass graft(s)*, with angina (eg. internal mammary artery)

I25.720	Atherosclerosis of autologous artery coronary artery bypass graft(s), with unstable angina pectoris
I25.721	Atherosclerosis of autologous artery coronary artery bypass graft(s), with angina pectoris with documented spasm
I25.728	Atherosclerosis of autologous artery coronary artery bypass graft(s), with other forms of angina pectoris
I25.729	Atherosclerosis of autologous artery coronary artery bypass graft(s), with unspecified angina pectoris

- Atherosclerosis of *nonautologous biological coronary artery bypass graft(s)*, with angina (eg. cadaveric saphenous vein or internal mammary artery)

I25.730	Atherosclerosis of nonautologous bio coronary artery bypass graft(s), with unstable angina pectoris
I25.731	Atherosclerosis of nonautologous bio coronary artery bypass graft(s), with angina pectoris with documented spasm
I25.738	Atherosclerosis of nonautologous bio coronary artery bypass graft(s), with other forms of angina
I25.739	Atherosclerosis of nonautologous bio coronary artery bypass graft(s), with unspecified angina pectoris

Crosswalk: CAD and Angina

- Atherosclerosis of *native coronary artery of transplanted heart* with angina

ICD-10-CM	
I25.750	Atherosclerosis of native coronary artery of transplanted heart with unstable angina pectoris
I25.751	Atherosclerosis of native coronary artery of transplanted heart with angina pectoris with documented spasm
I25.758	Atherosclerosis of native coronary artery of transplanted heart with other forms of angina pectoris
I25.759	Atherosclerosis of native coronary artery of transplanted heart with unspecified angina pectoris

- Atherosclerosis of *bypass graft of coronary artery of transplanted heart* with angina

I25.760	Atherosclerosis of bypass graft of coronary artery of transplanted heart with unstable angina pectoris
I25.761	Atherosclerosis of bypass graft of coronary artery of transplanted heart with angina pectoris with documented spasm
I25.768	Atherosclerosis of bypass graft of coronary artery of transplanted heart with other forms of angina
I25.769	Atherosclerosis of bypass graft of coronary artery of transplanted heart with unspecified angina

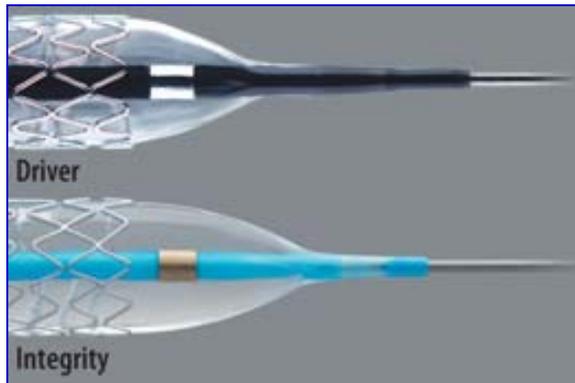
- Atherosclerosis of *other coronary artery bypass graft(s)* with angina

I25.790	Atherosclerosis of other coronary artery bypass graft with unstable angina pectoris
I25.791	Atherosclerosis of other coronary artery bypass graft with angina pectoris with documented spasm
I25.798	Atherosclerosis of other coronary artery bypass graft with other forms of angina
I25.799	Atherosclerosis of other coronary artery bypass graft with unspecified angina

Crosswalk: CAD and Angina

Coronary Artery Disease: Other Add-Ons

ICD-9-CM		ICD-10-CM	
414.2	Chronic total occlusion of coronary artery	I25.82	Chronic total occlusion of coronary artery
414.3	Coronary atherosclerosis due to lipid rich plaque	I25.83	Coronary atherosclerosis due to lipid rich plaque
414.4	Coronary atherosclerosis due to calcified coronary lesion	I25.84	Coronary atherosclerosis due to calcified coronary lesion



Crosswalk: Acute Myocardial Infarction

ICD-10-CM handles acute myocardial infarction differently from ICD-9-CM.

AMI: ICD-9-CM

ICD-9-CM	
410.0x	Acute myocardial infarction, of anterolateral wall
410.1x	Acute myocardial infarction, of other anterior wall
410.2x	Acute myocardial infarction, of inferolateral wall
410.3x	Acute myocardial infarction, of inferoposterior wall
410.4x	Acute myocardial infarction, of other inferior wall
410.5x	Acute myocardial infarction, of other lateral wall
410.6x	Acute myocardial infarction, true posterior wall
410.7x	Acute myocardial infarction, subendocardial (NSTEMI)
410.8x	Acute myocardial infarction, of other specified sites
410.9x	Acute myocardial infarction, unspecified site

5th digit

0 – unspecified episode of care

1 – initial episode of care

2 – subsequent episode of care

AMI: ICD-10-CM

- Episode of care is not identified per se.
- AMI is differentiated between initial AMI (I21) and subsequent AMI (I22)
- The AMI site identifies the specific coronary artery involved.

Crosswalk: Acute Myocardial Infarction

Initial AMI (I21)

ICD-10-CM	
I21.01	ST elevation (STEMI) myocardial infarction involving left main coronary artery
I21.02	ST elevation (STEMI) myocardial infarction involving left anterior descending coronary artery
I21.09	ST elevation (STEMI) myocardial infarction involving other coronary artery of anterior wall
I21.11	ST elevation (STEMI) myocardial infarction involving right coronary artery
I21.19	ST elevation (STEMI) myocardial infarction involving other coronary artery
I21.21	ST elevation (STEMI) myocardial infarction involving left circumflex coronary artery
I21.29	ST elevation (STEMI) myocardial infarction involving other sites
I21.3	ST elevation (STEMI) myocardial infarction of unspecified site
I21.4	Non-ST elevation (NSTEMI) myocardial infarction



Documentation should specify the coronary artery or wall involved.

10

Initial AMI codes continue to be assigned to encounters for continued care, including transfer to another hospital or post-acute setting, while the AMI is within 28 days of onset.



Crosswalk: Acute Myocardial Infarction

Subsequent AMI (I22)

ICD-10-CM	
I22.0	Subsequent ST elevation (STEMI) myocardial infarction of anterior wall
I22.1	Subsequent ST elevation (STEMI) myocardial infarction of inferior wall
I22.2	Subsequent non-ST elevation (NSTEMI) myocardial infarction
I22.8	Subsequent ST elevation (STEMI) myocardial infarction of other sites
I22.9	Subsequent ST elevation (STEMI) myocardial infarction of unspecified site

10 A subsequent AMI is a new AMI that occurs within 28 days of a previous AMI, regardless of site.

10 Codes from I22 cannot be assigned alone. They must always be assigned with a code from I21. Sequencing of the codes depends on the circumstances.

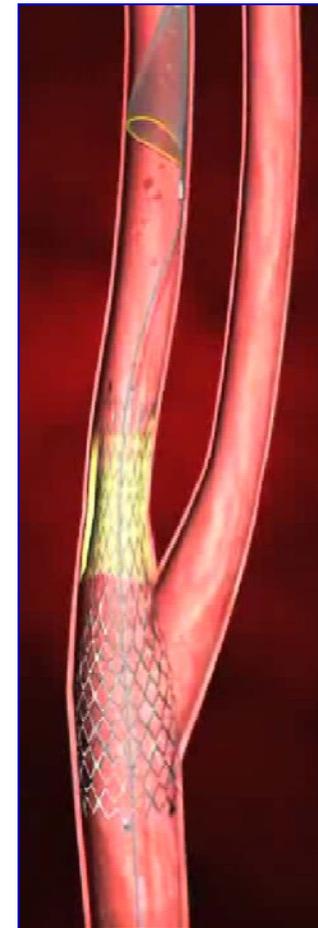
Old AMI

ICD-9-CM		ICD-10-CM	
412	Old myocardial infarction	I25.2	Old myocardial infarction

Crosswalk: Carotid Artery Stenosis

ICD-10-CM provides additional specificity on whether the stenosis is in the right, left or bilateral carotid arteries.

ICD-9-CM		ICD-10-CM	
433.10	Occlusion and stenosis of carotid artery without mention of cerebral infarction	I65.21	Occlusion and stenosis of right carotid artery, not resulting in cerebral infarction
		I65.22	Occlusion and stenosis of left carotid artery, not resulting in cerebral infarction
		I65.23	Occlusion and stenosis of bilateral carotid artery, not resulting in cerebral infarction
		I65.29	Occlusion and stenosis of unspecified carotid artery, not resulting in cerebral infarction



Crosswalk: Varicose Veins

ICD-10-CM identifies the same manifestations, while adding specificity on the particular leg involved as well as the site of ulceration when present.

Varicose Veins: With Ulcer

ICD-9-CM		ICD-10-CM		
454.0	Varicose veins of lower extremities with ulcer	I83.00~	Varicose veins of unspecified lower extremity with ulcer	1-thigh 2-calf 3-ankle 4-heel and midfoot 5-other part of foot 8-other part of lower leg 9-unspecified site
		I83.01~	Varicose veins of right lower extremity with ulcer	
		I83.02~	Varicose veins of left lower extremity with ulcer	

Varicose Veins: With Inflammation

ICD-9-CM		ICD-10-CM	
454.1	Varicose veins of lower extremities with inflammation	I83.10	Varicose veins of unspecified lower extremity with inflammation
		I83.11	Varicose veins of right lower extremity with inflammation
		I83.12	Varicose veins of left lower extremity with inflammation

Crosswalk: Varicose Veins

Varicose Veins: With Ulcer and Inflammation

ICD-9-CM		ICD-10-CM		
454.2	Varicose veins of lower extremities with ulcer and inflammation	I83.20~	Varicose veins of unspecified lower extremity with both ulcer and inflammation	1-thigh 2-calf 3-ankle 4-heel and midfoot 5-other part of foot 8-other part of lower leg 9-unspecified site
		I83.21~	Varicose veins of right lower extremity with both ulcer and inflammation	
		I83.22~	Varicose veins of left lower extremity with both ulcer and inflammation	

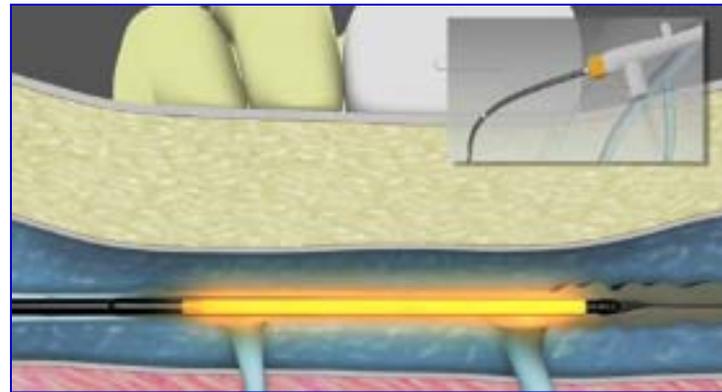
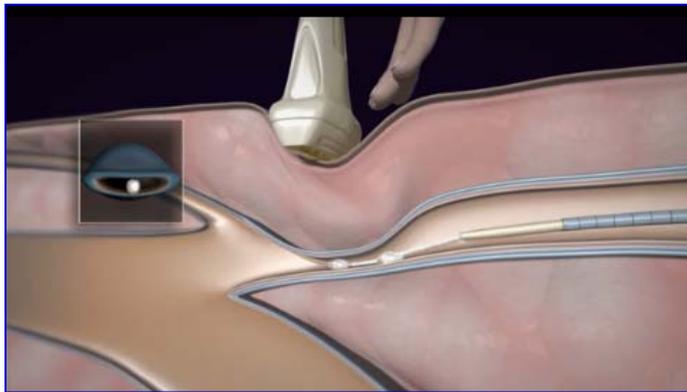
Varicose Veins: With Other Complications

ICD-9-CM		ICD-10-CM		
454.8	Varicose veins of lower extremities with other complications	I83.811	Varicose veins of right lower extremities with pain	
		I83.812	Varicose veins of left lower extremities with pain	
		I83.813	Varicose veins of bilateral lower extremities with pain	
		I83.819	Varicose veins of unspecified lower extremities with pain	
		I83.891	Varicose veins of right lower extremities with other complications	
		I83.892	Varicose veins of left lower extremities with other complications	
		I83.893	Varicose veins of bilateral lower extremities with other complications	
		I83.899	Varicose veins of unspecified lower extremities with other complications	

Crosswalk: Varicose Veins

Varicose Veins: Asymptomatic

ICD-9-CM		ICD-10-CM	
454.9	Varicose veins of lower extremities, asymptomatic	183.90	Asymptomatic varicose veins of unspecified lower extremity
		183.91	Asymptomatic varicose veins of right lower extremity
		183.92	Asymptomatic varicose veins of left lower extremity
		183.93	Asymptomatic varicose veins of bilateral lower extremities



Crosswalk: Device Complications

Mechanical Complication: Aortic Graft

- These codes are used when, for example, an aortic endograft has developed an endoleak or the graft has migrated out of position.

ICD-9-CM		ICD-10-CM	
996.1	Mechanical complication of other vascular device, implant or graft	T82.310A	Breakdown (mechanical) of aortic (bifurcation) graft (replacement)
		T82.320A	Displacement of aortic (bifurcation) graft (replacement)
		T82.330A	Leakage of aortic (bifurcation) graft (replacement)
		T82.390A	Other mechanical complication of aortic (bifurcation) graft (replacement)

10

Mechanical complication is defined the same way in ICD-10-CM as it is in ICD-9-CM.

- Breakage of device
- Malposition of device
- Leakage of device
- Mechanical obstruction of device
- Perforation of device
- Protrusion of device

Crosswalk: Device Complications

Other Complications: Cardiac and Vascular Implants

- These codes are used for in-stent restenosis of coronary and peripheral vascular stents.

ICD-9-CM		ICD-10-CM	
996.72	Other complication due to other cardiac device, implant and graft	T82.857A	Stenosis of cardiac prosthetic devices, implants and grafts, initial encounter

ICD-9-CM		ICD-10-CM	
996.74	Other complication due to other vascular device , implant and graft	T82.858A	Stenosis of vascular prosthetic devices, implants and grafts, initial encounter

- 10** End-stent stenosis of stents due to progression of atherosclerosis is not coded as a complication. Code atherosclerosis of the vessel instead.



Physicians should document the specific site of the stent stenosis (in-stent, end-stent) and whether it is due to progression of disease.

Crosswalk: Status

Status

- These ICD-10-CM makes available codes to indicate that the patient is status post angioplasty, either with a stent or without a stent, in coronary and peripheral vessels.

ICD-9-CM		ICD-10-CM	
V45.82	Percutaneous transluminal coronary angioplasty status	Z95.5	Presence of coronary angioplasty implant and graft
		Z98.61	Coronary angioplasty status
		Z95.820	Peripheral vascular angioplasty status with implants and grafts
		Z98.62	Peripheral vascular angioplasty status

ICD-10-PCS Procedure Codes

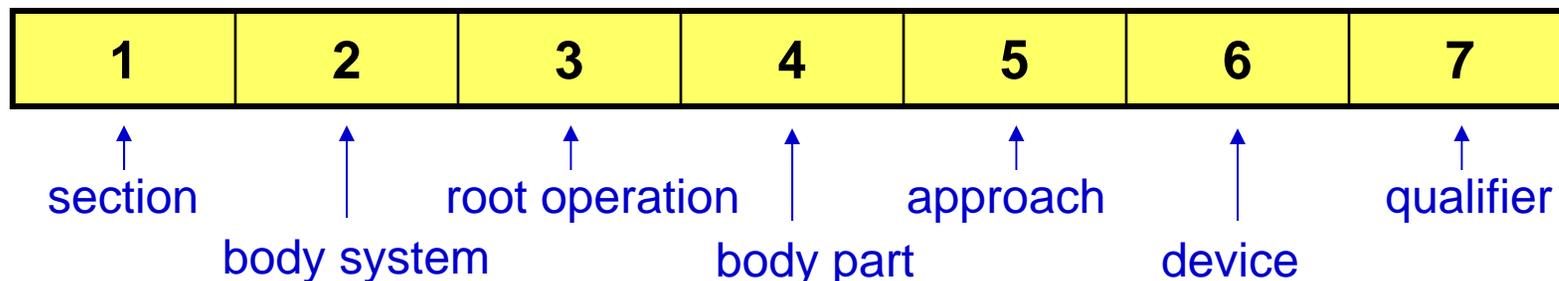


ICD-10-PCS Format

ICD-10-PCS procedure codes are administered by CMS.



- Codes are alpha-numeric and are always 7 digits long.
- There are virtually *no* unspecified or default codes.
- ICD-10-PCS uses standardized definitions throughout.
- Each position in an ICD-10-PCS procedure code represents a distinct element.



Structure of ICD-10-PCS Codes

- In ICD-10-PCS, codes are not assigned per se. They are *constructed*, character by character.
- Rather than a Tabular list of codes, ICD-10-PCS displays tables from which values for each position are selected.

<i>Section</i>	0	Medical and Surgical	
<i>Body System</i>	2	Heart and Great Vessels	
<i>Operation</i>	7	Dilation: Expanding an orifice or the lumen of a tubular body part	
<i>Body Part</i>	<i>Approach</i>	<i>Device</i>	<i>Qualifier</i>
0 Coronary Artery, One Site 1 Coronary Artery, Two Sites 2 Coronary Artery, Three Sites 3 Coronary Artery, Four or More Sites	0 Open 3 Percutaneous 4 Percutaneous Endoscopic	4 Intraluminal Device, Drug-eluting D Intraluminal Device T Intraluminal Device, Radioactive Z No Device	6 Bifurcation Z No Qualifier

Angioplasty of left anterior descending and left circumflex

02713ZZ Dilation of coronary artery, two sites, percutaneous approach

Stenting of left anterior descending and left circumflex with drug-eluting stent

027134Z Dilation of coronary artery, two sites, with drug-eluting intraluminal device, percutaneous approach

ICD-10-PCS Terminology

Section	0	Medical and Surgical	
Body System	4	Lower Arteries	
Operation	V	Restriction: Partially closing an orifice or the lumen of a tubular body part	
Body Part	Approach	Device	Qualifier
0 Abdominal Aorta	0 Open 3 Percutaneous 4 Percutaneous Endoscopic	D Intraluminal Device	J Temporary Z No Qualifier
C Common Iliac Artery, Right D Common Iliac Artery, Left E Internal Iliac Artery, Right F Internal Iliac Artery, Left H External Iliac Artery, Right J External Iliac Artery, Left	0 Open 3 Percutaneous 4 Percutaneous Endoscopic	C Extraluminal Device D Intraluminal Device Z No Device	Z No Qualifier

Endovascular repair of AAA with endograft

04V03DZ Restriction of abdominal aorta with intraluminal device, percutaneous approach



“It is the coder’s responsibility to determine what the documentation in the medical record equates to in the PCS definitions. The physician is not expected to use the terms used in PCS code descriptions...”

Volume of Procedure Codes

ICD-10-PCS has far more procedure codes than ICD-9-CM and provides much greater specificity.

ICD-9-CM
3,882 codes
ICD-10-PCS
71,924 codes

Peripheral Atherectomy ICD-9-CM 1 code
 ICD-10-PCS 30 codes

<i>Section</i>	0	Medical and Surgical
<i>Body System</i>	4	Lower Arteries
<i>Operation</i>	C	Extirpation: Taking or cutting out solid matter from a body part

<i>Body Part</i>	<i>Approach</i>	<i>Device</i>	<i>Qualifier</i>
1 Celiac Artery 2 Gastric Artery 3 Hepatic Artery 4 Splenic Artery 5 Superior Mesenteric Artery 6 Colic Artery, Right 7 Colic Artery, Left 8 Colic Artery, Middle 9 Renal Artery, Right A Renal Artery, Left B Inferior Mesenteric Artery C Common Iliac Artery, Right D Common Iliac Artery, Left	0 Open 3 Percutaneous 4 Percutaneous Endoscopic	Z No Device	Z No Qualifier

Implementation Issues



Documentation Practices

ICD-10 raises the bar on specificity in documentation for diagnoses.

Peripheral atherosclerosis

- Whether atherosclerosis is present in a native vessel or a bypass graft
- Type of bypass graft: autologous vein, cadaveric, synthetic, artery
- Atherosclerotic manifestations: claudication, rest pain, ulceration, gangrene
- Precise location of atherosclerotic ulcer

Coronary artery disease

- presence or absence of angina
- type of angina, eg. unstable, spasm
- type of vessel, eg. native, bypass graft
- type of bypass graft, eg. SVG, LIMA

AMI

- Culprit lesion or site

Restenosis of stent

- In-stent or end stent
- Whether restenosis is due to progression of atherosclerosis



“PVD”

“PAD”

*“restenosis
of stent”*

Documentation Practices

ICD-10 also raises the bar on specificity in documentation for procedures.

Procedure Specificity

- Whether the specific location in which an endograft component is being placed has pathology or is being used strictly as a landing zone
- Type of angioplasty, ie. whether it was performed with drug-coated balloons
- Type of stents placed, ie. whether they are bare metal or drug-eluting

Other documentation considerations

- Take note of coder queries requesting additional information and include those details in similar cases going forward.
- CMS has a useful primer for cardiology documentation:
<http://www.roadto10.org/action-plan/phase-2-train/primer-cardiology/>

Coverage Issues

CMS has converted its NCDs and ICD-10-CM codes are already being displayed on LCDs and on private payers' medical policies.

- Identify the practice's largest payers and check the codes on their on-line medical polices for familiarity as well as omissions.
- Check practice superbills against payer policies for differences.
- Alert the payer to possible discrepancies.



Be aware that the specificity of ICD-10-CM may allow payers to now enforce existing coverage rules more stringently.

Practice Implementation Checklist

1. Lay out a plan

- Identify which ICD-9 codes you use heavily
- Identify the staff that need to be trained in coding and/or documentation
- Contact vendors to learn their plans, ICD-10 related costs to the practice, and resources available to the practice
- Contact the specialty society for any resources available to the practice
- Visit the CMS website for useful tools and materials

2. Get trained

- Buy or download an ICD-10 diagnosis codebook
- Arrange and implement ICD-10 coding training for staff
- Arrange and obtain documentation training for physicians and other clinicians
- Crosswalk common diagnosis codes to ICD-10 and identify new requirements or differences in essential documentation
- Sign up for key CMS webinars to increase understanding of the ICD-10 environment

3. Update internal practice tools

- Convert superbills to ICD-10
- Convert other materials to ICD-10, such as authorizations, orders and referrals
- Identify common code-related causes for current claim denials and identify areas where ICD-10's specificity in documentation and code assignment can address this
- Obtain payer medical polices with ICD-10 codes for comparison

Practice Implementation Checklist

4. Work with vendors and payers

- Arrange and implement ICD-10 software upgrades
- Train staff on use of new software, either directly or via the vendor
- Identify EHR documentation templates and assess how they support ICD-10 specificity for claims submission and medical necessity
- Engage payers on any discrepancies and omissions in ICD-10 coding for medical policies
- Identify if payers anticipate any changes in processing and payment due to ICD-10
- Identify availability of testing with major payers



5. Test the process

- Perform testing on systems within the practice
- Perform end-to-end testing with vendors and/or payers
- Identify and correct issues raised during testing
- Educate staff on the impact of ICD-10 to payer edits, adjudication, and other claims elements to processes within the practice
- Repeat!

<http://coalitionforicd10.org/2015/01/12/you-can-do-it-guide-to-physician-icd-10-conversion/>

Appendix



Key Websites

CDC and CMS have a wealth of resources and educational materials available on-line for physician practices.

CDC <http://www.cdc.gov/nchs/icd/icd10cm.htm#icd2105>

- ICD-10-CM Tabular and Index
- Official ICD-10-CM guidelines
- Diagnosis code GEMS

CMS <http://www.roadto10.org/>

- Webcasts
- FAQs on ICD-10
- Templates for assessing vendors, billing services, payers
- Specialty references (common codes, documentation primers)
- Customizable practice action plans

Medtronic Contacts

Medtronic is available to assist with your ICD-10 questions and issues.

*We're here to
help make this
transition
smoother for you*

- Hotline: 1-877-347-9662
- Email us:
rs.cardiovascularhealtheconomics@medtronic.com
- Visit our reimbursement website at:
<http://www.medtronic.com/for-healthcare-professionals/products-therapies/cardiovascular/therapies/coding-coverage-reimbursement-resources/index.htm>

Questions

